LG

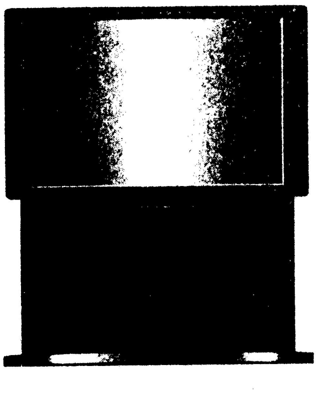
COLOR TV
SERVICE MANUAL

CHASSIS : MP-87B

MODEL : PF-43A20

CAUTION

BEFORE SERVICING THE CHASSIS,
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



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SAFETY PRECAUTIONS

IMPORTANT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by ⚠ in the Schematic Diagram and Replacement Parts List.
It is essential that these special safety parts should be replaced with the same components as recommended in this manual to prevent X-RADIATION, Shock, Fire, or other Hazards.
Do not modify the original design without permission of manufacturer.

General Guidance

An **Isolation Transformer should always be used** during the servicing of a receiver whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks.

It will also protect the receiver and it's components from being damaged by accidental shorts of the circuitary that may be inadvertently introduced during the service operation.

If any fuse (or Fusible Resistor) in this TV receiver is blown, replace it with the specified.

When replacing a high wattage resistor (Oxide Metal Film Resistor, over 1W), keep the resistor 10mm away from PCB.

Keep wires away from high voltage or high temperature parts.

Due to high vacuum and large surface area of picture tube, extreme care should be used in **handling the Picture Tube.** Do not lift the Picture tube by it's Neck.

X-RAY Radiation

Warning:

> The source of X-RAY RADIATION in this TV receiver is the High Voltage Section and the Picture Tube.
> For continued X-RAY RADIATION protection, the replacement tube must be the same type tube as specified in the Replacement Parts List.

To determine the presence of high voltage, use an accurate high impedance HV meter.

Adjust brightness, color, contrast controls to minimum.
Measure the high voltage.
The meter reading should indicate
23.5 ± 1.5KV: 14-19 inch, 26 ± 1.5KV: 19-21 inch,
29.0 ± 1.5KV: 25-29 inch, 30.0 ± 1.5KV: 32 inch
If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.

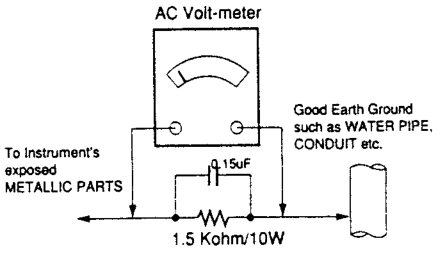
Before returning the receiver to the customer,

always perform an **AC leakage current check** on the exposed metallic parts of the cabinet, such as antennas, terminals, etc., to be sure the set is safe to operate without damage of electrical shock.

Leakage Current Cold Check(Antenna Cold Check)
With the instrument AC plug removed from AC source, connect an electrical jumper across the two AC plug prongs. Place the AC switch in the on positioin, connect one lead of ohm-meter to the AC plug prongs tied together and touch other ohm-meter lead in turn to each exposed metallic parts such as antenna terminals, phone jacks, etc.
If the exposed metallic part has a return path to the chassis, the measured resistance should be between 1MΩ and 5.2MΩ.
When the exposed metal has no return path to the chassis the reading must be infinite.
An other abnormality exists that must be corrected before the receiver is returned to the customer.

Leakage Current Hot Check (See below Figure)
Plug the AC cord directly into the AC outlet.
Do not use a line Isolation Transformer during this check.
Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.
Measure the AC voltage across the resistor using AC voltmeter with 1000 ohms/volt or more sensitivity.
Reverse plug the AC cord into the AC outlet and repeat AC voltage measurements for each esposed metallic part. Any voltage measured must not exceed 0.75 volt RMS which is corresponds to 0.5mA.
In case any measurement is out of the limits sepcified, there is possibility of shock hazard and the set must be checked and repaired before it is returned to the customer.

Leakage Current Hot Check circuit


AC Volt-meter
Good Earth Ground such as WATER PIPE, CONDUIT etc.
To Instrument's exposed METALLIC PARTS
0.15uF
1.5 Kohm/10W

SERVICING PRECAUTIONS

CAUTION: Before servicing receivers covered by this service manual and its supplements and addenda, read and follow the *SAFETY PRECAUTIONS* on page 3 of this publication.

NOTE: If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions on page 3 of this publication, always follow the safety precautions. Remember: Safety First.

General Servicing Precautions

1. Always unplug the receiver AC power cord from the AC power source before;
   a. Removing or reinstalling any component, circuit board module or any other receiver assembly.
   b. Disconnecting or reconnecting any receiver electrical plug or other electrical connection.
   c. Connecting a test substitute in parallel with an electrolytic capacitor in the receiver.
   CAUTION: A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.
   d. Discharging the picture tube anode.
2. Test high voltage only by measuring it with an appropriate high voltage meter or other voltage measuring device (DVM, FETVOM, etc) equipped with a suitable high voltage probe.
   Do not test high voltage by "drawing an arc".
3. Discharge the picture tube anode only by (a) first connecting one end of an insulated clip lead to the degaussing or kine aquadag grounding system shield at the point where the picture tube socket ground lead is connected, and then (b) touch the other end of the insulated clip lead to the picture tube anode button, using an insulating handle to avoid personal contact with high voltage.
4. Do not spray chemicals on or near this receiver or any of its assemblies.
5. Unless specified otherwise in this service manual, clean electrical contacts only by applying the following mixture to the contacts with a pipe cleaner, cotton-tipped stick or comparable nonabrasive applicator; 10% (by volume) Acetone and 90% (by volume) isopropyl alcohol (90%-99% strength)
   CAUTION: This is a flammable mixture.
   Unless specified otherwise in this service manual, lubrication of contacts in not required.
6. Do not defeat any plug/socket B+ voltage interlocks with which receivers covered by this service manual might be equipped.
7. Do not apply AC power to this instrument and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
8. Always connect the test receiver ground lead to the receiver chassis ground before connecting the test receiver positive lead.
   Always remove the test receiver ground lead last.
9. ***Use with this receiver only the test fixtures specified in this service manual.***
   CAUTION: Do not connect the test fixture ground strap to any heatsink in this receiver.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called *Electrostatically Sensitive (ES) Devices.* Examples of typical ES devices are integrated circuits and some fieldeffect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed to prevent potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static type solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficent to demage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a repalcement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the bruching together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

General Soldering Guidelines

1. Use a grounded-tip, low-wattage soldering iron and appropriate tip size and shape that will maintan tip temperature within the range or 500° F to 600° F.
2. Use an appropriate gauge of RMA resin-core solder composed of 60 parts tin/40 parts lead.
3. Keep the soldering iron tip clean and well tinned.
4. Thorohly clean the surfaces to be soldered. Use a mall wirebristle (0.5 inch, or 1.25cm) brush with a metal handle.
   Do not use freon-propelled spray-on cleaners.
5. Use the following unsoldering technique
   a. Allow the soldering iron tip to reach normal temperature. (500° F to 600° F)
   b. Heat the component lead until the solder melts.
   c. Quickly draw the melted solder with an anti-static, suction-type solder removal device or with solder braid.
   CAUTION: Work quickly to avoid overheating the circuiboard printed foil.
6. Use the following soldering technique.
   a. Allow the soldering iron tip to reach a normal temperature (500° F to 600° F)
   b. First, hold the soldering iron tip and solder the strand against the component lead until the solder melts.

   c. Quickly move the soldering iron tip to the junction of the component lead and the printed circuit foil, and hold it there only until the solder flows onto and around both the component lead and the foil.
   CAUTION: Work quickly to avoid overheating the circuit board printed foil.
   d. Closely inspect the solder area and remove any excess or splashed solder with a small wire-bristle brush.

IC Remove/Replacement

Some chassis circuit boards have slotted holes (oblong) through which the IC leads are inserted and then bent flat against the circuit foil. When holes are the slotted type, the following technique should be used to remove and replace the IC. When working with boards using the familiar round hole, use the standard technique as outlined in parapraphs 5 and 6 above.

Removal

1. Desolder and straighten each IC lead in one operation by gently prying up on the lead with the soldering iron tip as the solder melts.
2. Draw away the melted solder with an anti-static suction-type solder removal device (or with solder braid) before removing the IC.

Replacement

1. Carefully insert the replacement IC in the circuit boare.
2. Carefully bend each IC lead against the circuit foil pad and solder it.
3. Clean the soldered areas with a small wire-bristle brush.
   (It is not necessary to reapply acrylic coating to the areas).

"Small-Signal" Discrete Transistor Removal/Replacement

1. Remove the defective transistor by clipping its leads as close as possible to the component body.
2. Bend into a "U" shape the end of each of three leads remaining on the circuit board.
3. Bend into a "U" shape the replacement transistor leads.
4. Connect the replacement transistor leads to the corresponding leads extending from the circuit board and crimp the "U" with long nose pliers to insure metal to metal contact then solder each connection.

Power Output, Transistor Device Removal/Replacement

1. Heat and remove all solder from around the transistor leads.
2. Remove the heatsink mounting screw (if so equipped).
3. Carefully remove the transistor from the heat sink of the circuit board.
4. Insert new transistor in the circuit board.
5. Solder each transistor lead, and clip off excess lead.
6. Replace heatsink.

Diode Removal/Replacement

1. Remove defective diode by clipping its leads as close as possible to diode body.
2. Bend the two remaining leads perpendicula y to the circuit board.
3. Observing diode polarity, wrap each lead of the new diode around the corresponding lead on the circuit board.
4. Securely crimp each connection and solder it.
5. Inspect (on the circuit board copper side) the solder joints of the two "original" leads. If they are not shiny, reheat them and if necessary, apply additional solder.

Fuse and Conventional Resistor Removal/Replacement

1. Clip each fuse or resistor lead at top of the circuit board hollow stake.
2. Securely crimp the leads of replacement component around notch at stake top.
3. Solder the connections.
   CAUTION: Maintain original spacing between the replaced component and adjacent components and the circuit board to prevent excessive component temperatures.

Circuit Board Foil Repair

Excessive heat applied to the copper foil of any printed circuit board will weaken the adhesive that bonds the foil to the circuit board causing the foil to separate from or "lift-off" the board. The following guidelines and procedures should be followed whenever this condition is encountered.

At IC Connections

To repair a defective copper pattern at IC connections use the following procedure to install a jumper wire on the copper pattern side of the circuit board. (Use this technique only on IC connections).

1. Carefully remove the damaged copper pattern with a sharp knife. (Remove only as much copper as absolutely necessary).
2. carefully scratch away the solder resist and acrylic coating (if used) from the end of the remaining copper pattern.
3. Bend a small "U" in one end of a small gauge jumper wire and carefully crimp it around the IC pin. Solder the IC connection.
4. Route the jumper wire along the path of the out-away copper pattern and let it overlap the previously scraped end of the good copper pattern. Solder the overlapped area and clip off any excess jumper wire.

At Other Connections

Use the following technique to repair the defective copper pattern at connections other than IC Pins. This technique involoves the installation of a jumper wire on the component side of the circuit board.

1. Remove the defective copper pattern with a sharp knife. Remove at least 1/4 inch of copper, to ensure that a hazardous condition will not exist if the jumper wire opens.
2. Trace along the copper pattern from both sides of the pattern break and locate the nearest component that is directly connected to the affected copper pattern.
3. Connect insulated 20-gauge jumper wire from the lead of the nearest component on one side of the pattern break to the lead of the nearest component on the other side.
   Carefully crimp and solder the connections.
   CAUTION: Be sure the insulated jumper wire is dressed so the it does not touch components or sharp edges.

SPECIFICATIONS

NOTE : Specifications and others are subject to change without notice for improvement.

- **Video input system:**
  Multi 26 System
  (Refer to Table 1)

- **Intermediate Frequency**
  Vision IF : 38.0MHz
  Color IF : 33.57MHz ※SECAM : 38.0-4.25MHz
  34.42MHz(M) 38.0-4.40625MHz
  Sound IF : 32.5MHz(B/G)
  32.0MHz(I)
  31.5MHz(D/K,K1)
  33.5MHz(M)

- **Tuning range**

Band	**PAL/SECAM-B/G**	
	For TV	For CATV
VHF-Low	Ch 2-4	
		S1'-S3', S1
VHF-High		S2-S10
	Ch 5-12	
		S11-S20
Hyper		**S21-S41**
UHF	Ch 21-69	

- **OSD (On Screen Display):**
  Menu Method

- **Antenna input impedance:** VHF/UHF 75ohm, Unbalanced

- **Voice coil impedance :** 8 ohm

- **External connections :**
  S-VIDEO (Super Video)
  A/V in : 1 pair] Front
  S-VIDEO (Super Video)
  Scart(Full)
  A/V in : 1 pair
  A/V out : 1 pair] Rear

	Specifications
Video in/out	1Vp-p±3dB, 75ohm
Audio in (2 way)	0.5Vrms±3dB, over 10Kohm
Audio out (2 way)	0.5Vrms±3dB, below 1Kohm
R. G. B in	0.7Vp-p±3dB

- **Power requirements :**
  100-270 Vac, 50/60HZ

- **Power consumption :**
  210 Wmax.

- **Tuning system :**
  VS (Voltage Synthesizer)
  100 Program Memory

- **Sound output :**
  25 W max. X 2 way: (4 speaker)
  Dual / Stereo : A2, NICAM

- **Local button :**
  Menu, OK, TV/AV, POWER
  Volume up(+), down(-)
  Program up(+), down(-)

- **Function :**
  Auto Program
  Manual Program
  Auto Sleep
  ON/OFF TIMER

  CATV/Hyper band
  Teletext (TOP/FLOF/LIST)
  PIP (Picture In Picture)

Child Lock :
In the Lock On state the TV can only be operated by the remote controller.
If any button on the front panel is pressed, "CHILD LOCK ON" is displayed on the screen but the button's function is not performed.
To cancel of this mode, select lock off with menu button on remote controller only.

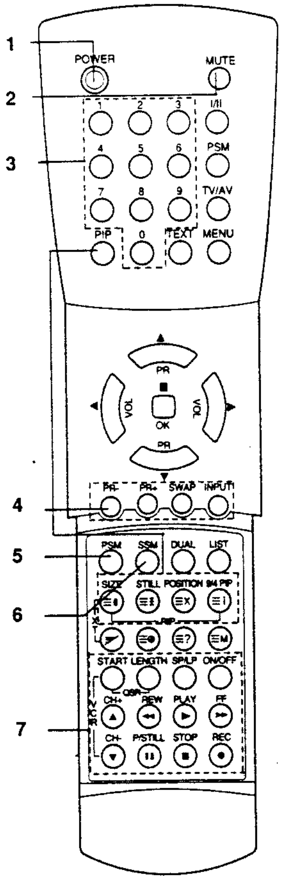
- **Features**
  Picture quality improvement circuit
  - YNR (Luminance Noise Reduction)
  - Picture Outline Compensation

Table 1 : **Receiving System (26 System)**

No	**Receiving System**	**Function**	**Receiving Channel**
1	PAL-B	Reception of broadcast and play-back for Video Tape Recorder	VHF Band PAL/SECAM-B : 2-12 PAL/SECAM-D : 1-12 SECAM-K1 : 2-9 NTSC-M (US) : 2-13 NTSC-M (JAPAN) : 1-12 UHF Band PAL/SECAM-G : 21-69 PAL-I : 21-69 SECAM-K : 21-69 PAL-K : 13-56 NTSC-M (US) : 14-78 NTSC-M (JAPAN) : 13-62
2	PAL-G		
3	PAL-I		
4	PAL-D		
5	PAL-K		
6	SECAM-B		
7	SECAM-G		
8	SECAM-D		
9	SECAM-K		
10	SECAM-K1		
11	NTSC-M		
12	NTSC 4.43/5.5MHZ	Play-back for special Video Tape Recorder	
13	NTSC 4.43/6.0MHZ		
14	NTSC 4.43/6.5MHZ		
15	SECAM-I (6.0MHZ)		
16	SECAM-L (Video In)		
17	NTSC 3.58/4.5MHZ/50HZ	Play-back for special Video tape/Video disk player	
18	PAL 5.5MHZ/60HZ		
19	PAL 6.0MHZ/60HZ		
20	PAL 6.5MHZ/60HZ		
21	SECAM 5.5MHZ/60HZ		
22	SECAM 6.0MHZ/60HZ		
23	SECAM 6.5MHZ/60HZ		
24	NTSC 3.58/5.5MHZ	Play-back for special Video Tape Recorder	
25	NTSC 3.58/6.0MHZ		
26	NTSC 3.58/6.5MHZ		

CONTROLS DESCRIPTION

All the functions can be controlled with the remote control handset. Some functions can also be adjusted with the buttons on the front panel of the set.


1
2
3
4
5
6
7
POWER
MUTE
1 2 3 I/II
4 5 6 PSM
7 8 9 TV/AV
PIP 0 TEXT MENU
PR
VOL
OK
PR- PR+ SWAP INPUT
PSM SSM DUAL LIST
SIZE STILL POSITION 9/4 PIP
PIP
START LENGTH SP/LP ON/OFF
OSR
CH+ REW PLAY FF
CH- P/STILL STOP REC
VCR

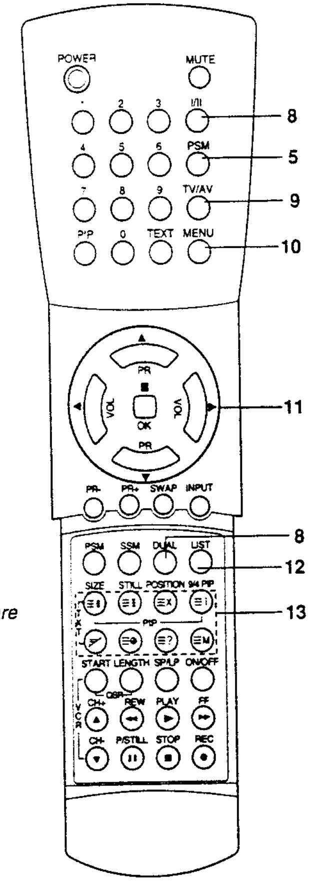
Remote control handset

Before you use the remote control handset, please install the batteries. See the next page.

1. **POWER**
   switches the set on from standby or off to standby.
2. **MUTE**
   switches the sound on or off.
3. **NUMBER BUTTONS**
   switch the set on from standby or directly select a number.
4. **PIP BUTTONS (option)**
   PIP
   switches the sub picture on or off.
   PR+/-
   selects a programme for the sub picture.
   SWAP
   alternates between main and sub picture.
   INPUT
   selects the input mode for the sub picture.
   SIZE
   adjusts the sub picture size.
   STILL
   freezes motion of the sub picture.
   POSITION
   relocates the sub picture in clockwise direction.
   9/4 PIP
   switches on or off the programme scan mode through 9 or 4 sub pictures.
5. **PSM (Picture Status Memory)**
   recalls your preferred picture setting.
6. **SSM (Sound Status Memory)**
   recalls your preferred sound setting.
7. **VCR BUTTONS (option)**
   control a LG video cassette recorder.

8. **DUAL**
   selects the language during dual language broadcast.
   selects mono sound during stereo broadcasts.
9. **TV/AV**
   selects TV or AV mode.
10. **MENU**
    selects a menu.
11. **▲/▼ (Programme Up/Down)**
    switches the set on from standby.
    selects a programme or a menu item.
    ◀/▶ (Volume Down/Up)
    adjusts the volume.
    adjusts menu settings.
    OK
    accepts your selection or displays the current mode.
12. **LIST**
    display the programme table.
13. **TELETEXT BUTTONS (option)**
    These buttons are used for teletext.
    For further details, see the 'Teletext' section.

***Note :** In teletext mode, the **PR+/-**, **SWAP** and **INPUT** buttons are used for teletext function.*


8
5
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11
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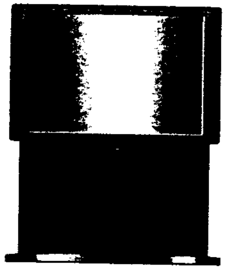
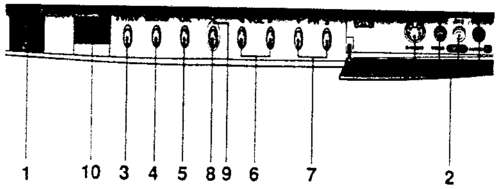
12
13
POWER
MUTE
1 2 3 I/II
4 5 6 PSM
7 8 9 TV/AV
PIP 0 TEXT MENU
PR
VOL
OK
PR- PR+ SWAP INPUT
PSM SSM DUAL LIST
SIZE STILL POSITION 9/4 PIP
PIP
TEXT
START LENGTH SP/LP ON/OFF
OSR
CH+ REW PLAY FF
CH- P/STILL STOP REC
VCR



Front panel



1. **MAIN POWER (on the side of TV)**
   switches the set on or off.

2. **AUDIO/VIDEO(or S-VIDEO) IN SOCKETS (AV 2)**
   Connect the audio/video(or S-video) out sockets of external equipment to these sockets.

3. **TV/AV**
   selects TV or AV mode.

4. **MENU**
   selects a menu.

5. **OK**
   accepts your selection or displays the current mode.

6. **◀/▶ (Volume Down/Up)**
   adjusts the volume.
   adjusts menu settings.

7. **▲/▼ (Programme Up/Down)**
   switches the set on from standby.
   selects a programme or a menu item.

8. **POWER**
   switches the set on from standby or off to standby.

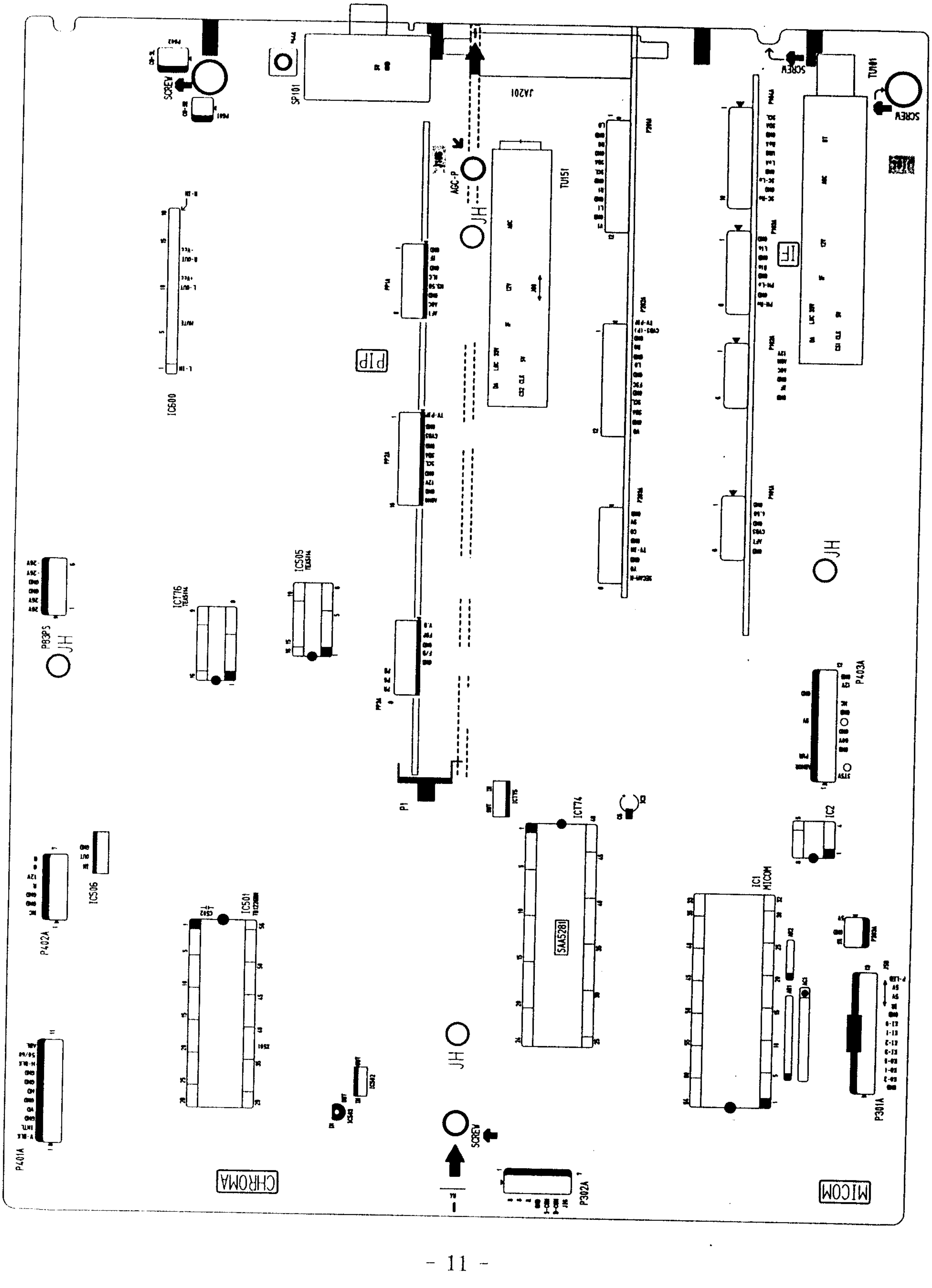
9. **POWER / STANDBY INDICATOR**
   illuminates when the set is in standby mode.
   dims when the set is switched on.

10. **REMOTE CONTROL SENSOR**

* **CASTERS (on the bottom)**
turn and move the set easily.

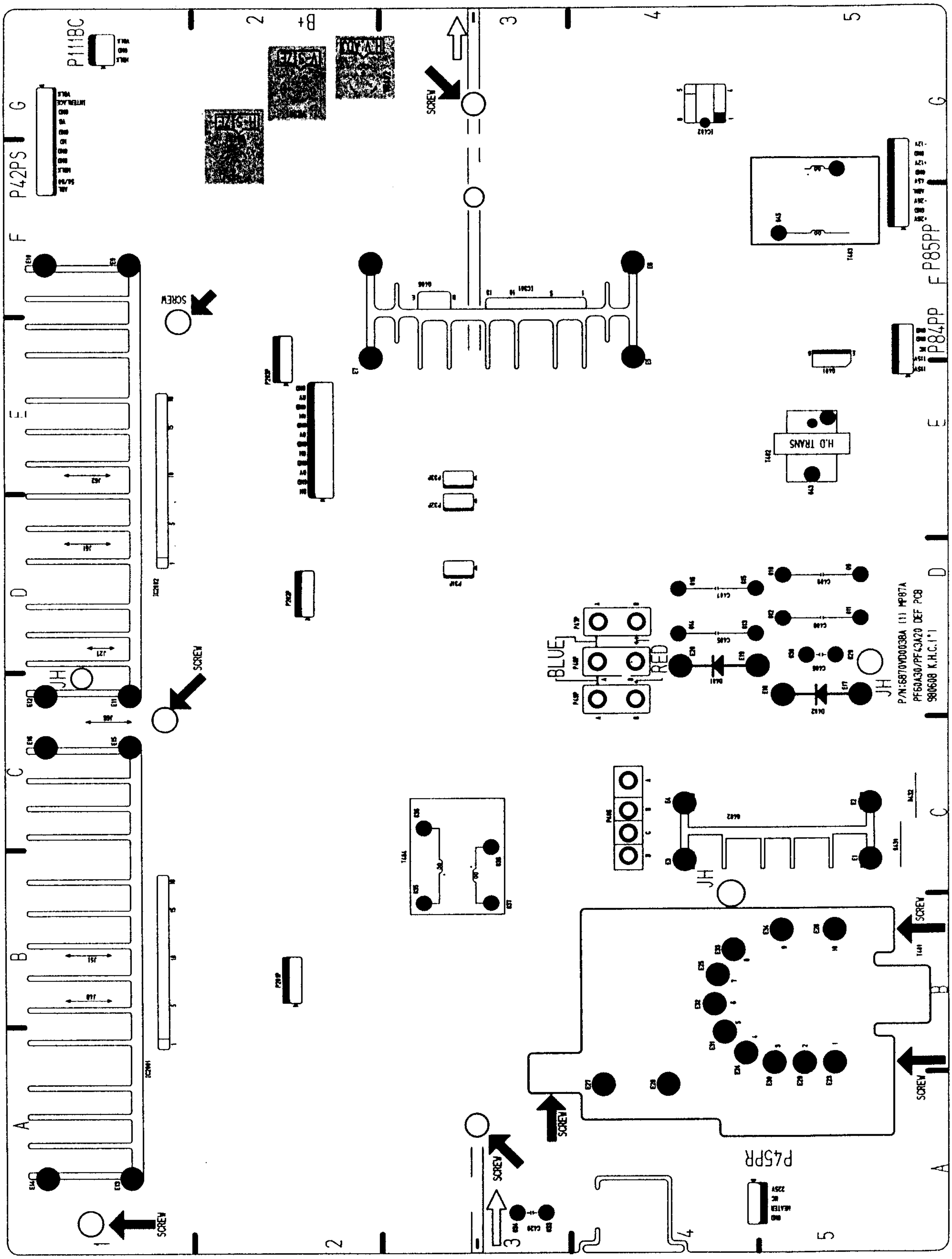
ALIGNMENT/TEST POINT LOCATION GUIDE

SIGNAL Board (Component side)

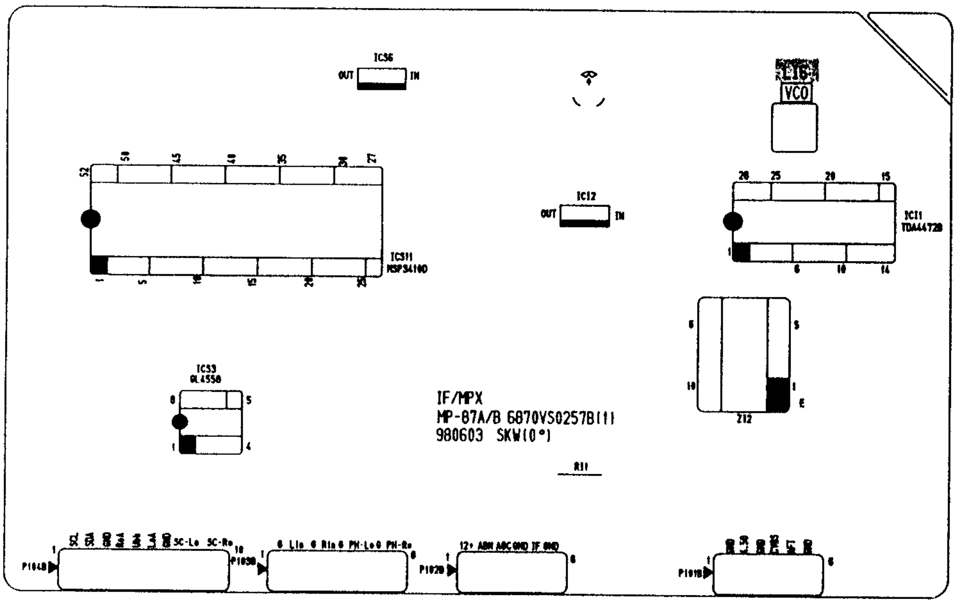


SCREW
SP101
JA201
TU151
TU101
AGC-P
JH
IF
PIP
IC600
IC505
IC776
P83PS
P403A
IC2
P1
IC774
SAA5281
IC1
MICOM
P402A
IC506
IC501
P301A
P401A
CHROMA
P302A
MICOM

DEFLECTION Board (Component side)


P111BC
P42PS
B+
SCREW
SCREW
SCREW
SCREW
SCREW
SCREW
SCREW
SCREW
H.D TRANS
BLUE
RED
JH
JH
JH
P85PP
P84PP
P45PR
P/N:6870VD0038A (1) MP87A
PF60A30/PF43A20 DEF PCB
980608 K.H.C.(*1)
A
B
C
D
E
F
G
1
2
3
4
5

IF (Component side)


IC56
OUT
IN
LT61
VCO
IC511
MSP3410D
IC12
OUT
IN
IC11
TDA4472B
Z12
IC53
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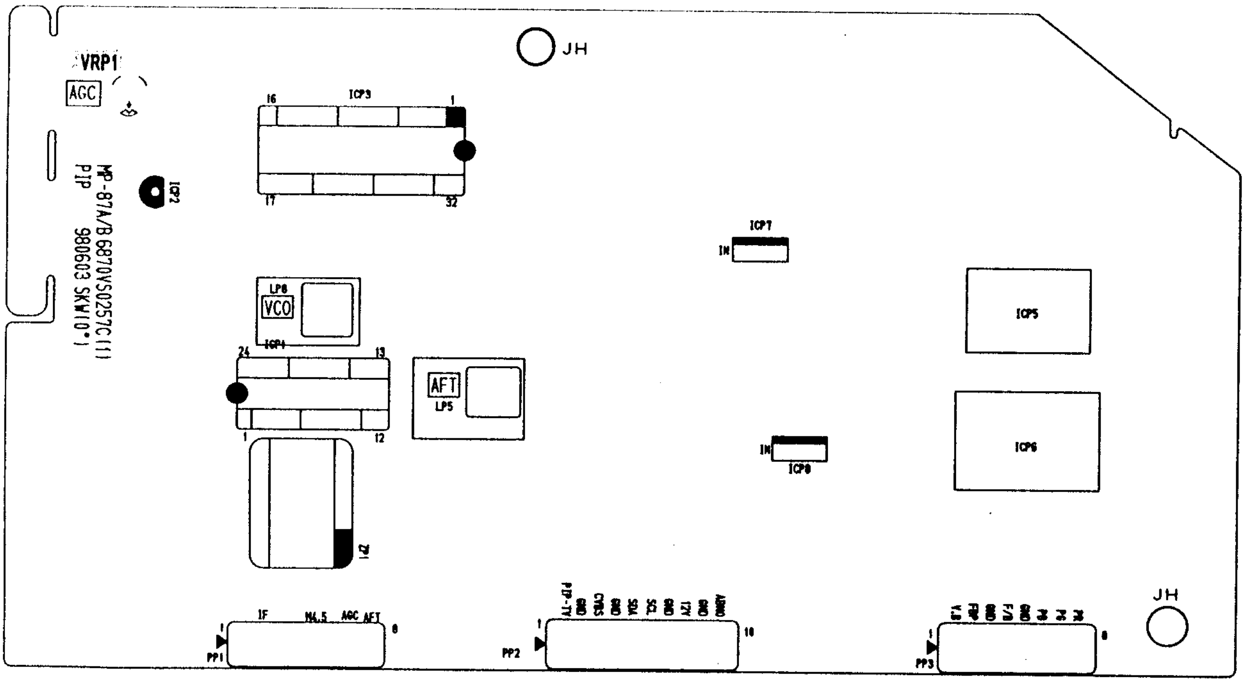
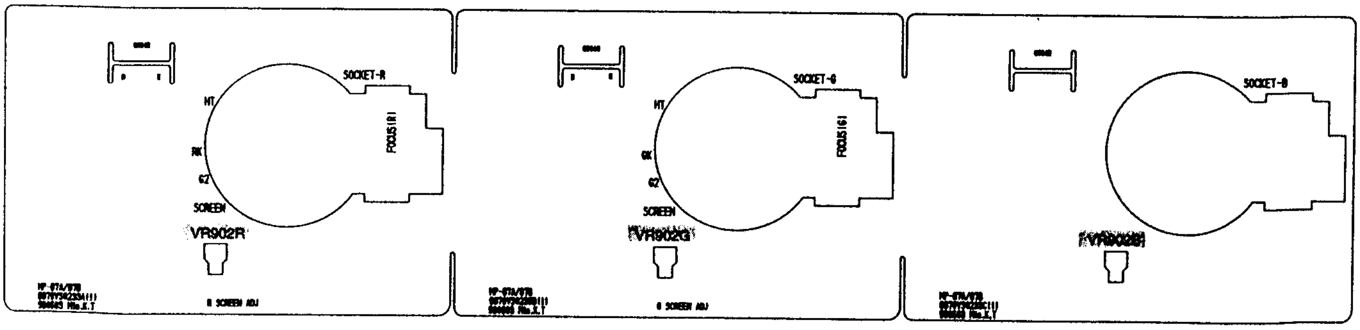
IF/MPX
MP-87A/B 6870VS0257B(1)
980603 SKW(0°)
R11
P104B
SC-Lo
SC-Ro
P103B
Lin
Rin
PH-Lo
PH-Ro
P102B
12+
ABN
AGC
GND
IF
GND
P101B

PIP (Component side)


VRP1
AGC
JH
ICP3
ICP2
MP-87A/B 6870VS0257C(1)
PIP 980603 SKW(0°)
ICP7
IN
LP6
VCO
ICP1
AFT
LP5
ICP5
ICP6
IN
ICP8
IZ
IF
M4.5
AGC
AFT
PP1
PIP-TV
GND
CVBS
GND
SDA
SCL
GND
12V
GND
AGND
PP2
PP3
JH

CPT Board (Component side)


SOCKET-R
HT
RK
G2
SCREEN
FOCUS(R)
VR902R
R SCREEN ADJ
SOCKET-G
HT
GK
G2
SCREEN
FOCUS(G)
VR902G
G SCREEN ADJ
SOCKET-B
VR902B

ADJUSTMENT INSTRUCTIONS

■Safety Precautions

1. It is safe to adjust after using insulating transformer between the power supply line and chassis input to prevent the risk of electric shock and protect the instrument.
2. Never disconnect leads while the TV receiver is on.
3. Don't short any portion of circuits while power is on.
4. Don't operate the TV with a non-moving picture for any more than 10 minutes as damage may occur to the phosphor on the CRT.
5. The adjustment must be done by the appropriate appliances and the correct step.
6. Unless otherwise noted, set the line voltage to 220V ± 10%, 50Hz.

■Test Equipment required

1. VIF sweep generator
2. Color bar/cross-hatch pattern generator
3. DC power supply
4. Digital multi-meter
5. Color analyzer

Preparation for VCO & AFT Adjustment

1. Connect the measuring equipment to the TV as shown in Fig.1.
2. Set RF output level of Sweep S.G (Signal Generator) to 90dBuV.
3. Set Alignment Scope, Volts/Div to 100mV (VCO) or 1V(AFT), AC/DC switch to AC, Line/Ext switch to Ext.

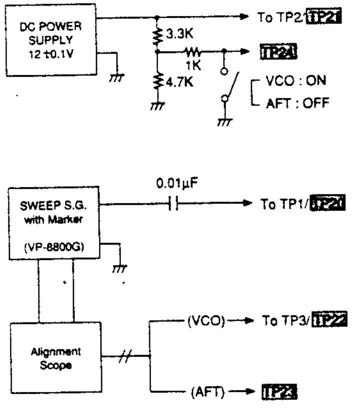


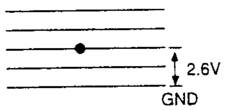
Fig.1: Connection Diagram of Equipment for VCO & AFT Adjustment.

NOTE :
■ : PIP Board

● Main VCO (Voltage Controlled Oscillator) Adjustment

Test Point :	TP3
Adjust :	LI6

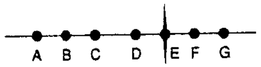
1) Turn on DC power supply.
2) Adjust LI6 so that the waveform of Oscilloscope becomes 2.6V DC.



● PIP VCO (Voltage Controlled Oscillator) Adjustment

Test Point :	TP22
Adjust :	LP8

1) Turn on DC power supply.
2) Adjust Video Detector Coil ([illegible]) so that a waveform on Alignment Scope is the same as below Fig.2.



A : 30.0MHz
B : 31.5MHz
C : 32.84MHz
D : 36.8MHz
E : 38.0MHz
F : 39.5MHz
G : 40.25MHz

Fig.2 : VCO waveform on Alignment Scope

● AFT (Auto Fine Tuning) Adjustment

Test Point :	[illegible]
Adjust :	[illegible]

1) Turn on DC power supply.
2) Adjust IF AFT coil (LP5) so that 38.0MHz (Vc) point may be centered as Fig.3.

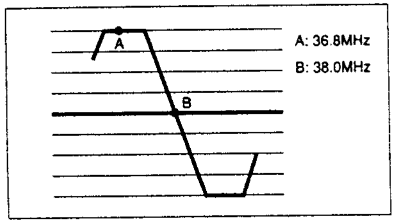


Fig.3: AFT waveform on Alignment Scope

● RF AGC (Auto Gain Control) Adjustment

Test Point :	J104/ J106
Adjust :	VRI1 / VRP1

The RF AGC control (VRI1/ VRP1) was aligned at the time of manufacture for optimum performance over a wide range conditions. Readjust of VRI1/ VRP1 should not be necessary unless unusual local conditions exist, such as:

1) Channel interference in a CATV system.
2) Picture bending and/or color beats, which are unusually due to excessive RF signal input when the receiver is too close to a transmitting tower or when the receiver is connected to an antenna distribution system where the RF signal has been amplified. In this case, the input signal should be attenuated(with pad or filter) to a satisfactory level.
3) Picture noise caused by "broadcast noise" or weak signal. If the broadcast is "clean" and the RF signal is at least 1mV(60dBuV), the picture will be noise free in any area.

Adjusting the VRI1/ VRP1 (RF AGC) control to one end of rotation will usually cause a relatively poor signal to noise ratio;
Adjusting to the other end of rotation will usually cause a degradation of over load capabilities resulting in color beats or adjacent channel reference.
For best results, adjust the VRI1/ VRP1 control while performing on all over local channels, or the voltage at J150/ J151 will be 6.0±0.1Vdc in RF level 60±1dBuV.

● High Voltage Stabilization Adjustment

Test Point :	J67 (on Deflection Board)
Adjust :	VR402

1) Tune the TV set to receive a digital pattern.
2) Set contrast to 100%, brightness and color to 50% respectively.
3) Adjust VR402 on the deflection board so that the DC voltmeter may be read 4.0±0.1Vdc.

● Vertical/Horizontal Size Adjustment

Test Point :	Observing Display
Adjust :	VR301 (Vertical Size) VR401 (Horizontal Size)

1) Tune the TV set to receive a digital pattern.
2) Set contrast to 100%, brightness and color to 50% respectively.
3) Adjust VR301 on the deflection board so that the circle of the digital pattern may be located within the effective screen on the TV screen.
4) Adjust VR401 on the deflection board so that the circle of the digital pattern looks like exact circle.

● Cut-off Adjustment

NOTE : This adjustment should be performed after warming up for 15 minutes at least.

Test Point :	Observing Display
Adjust :	VR902R, 902G, 902B (Cut-off)

1) Set VR902R, 902G, 902B on CRT Boards to the mechanical center position.
2) Tune the TV set to receive white pattern of PAL standard signal.
3) Press OK button on Control Board continuously and INPUT(blue) button on remote controller for obtaining a horizontal line on the middle of TV screen.
4) Turn VR902R, 902G, 902B counterclockwise and set it to the minimum position.
5) Turn VR902R, 902G, 902B clockwise slowly to appear a horizontal line.

RASTER SLANT/POSITION, FOCUS & CONVERGENCE ADJUSTMENT

Caution :

These adjustments have been factory aligned. Do not attempt to temper with these alignments. However, the effects of adjacent receiver components, or replacement of picture tube or deflection yoke may require the need to readjust these adjustments.

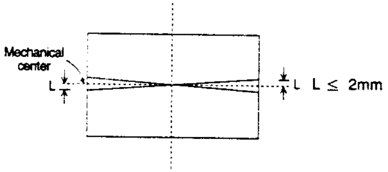
●Raster Slant Adjustment

1. Peliminary steps

1) The lens focus and electrical focus must be provisional alignment.
2) Tune the TV set to receive a digital pattern.
3) Press the buttons of Remote Controller for adjustment (SVC → ≡M →5→OK→ ≡M) to reset the convergence.

2. Adjustment

1) Set only green to be appeared on the screen.
2) Carefully rotate the DY of the green CRT so that the slant of raster become the following figure.



3) Set two color (R or B and G) to be appeared on the screen.
4) Set the slant of Red or Blue correspond to the green.

Note : 1. Tighten the tighten iron after loose completely tighten iron which fixing DY when adjusting raster slant and set position.
2. Never control to the tighten iron which fixed, it's condition is not untied.

●Raster Position Adjustment

1. Preliminary steps

1) The lens focus and electrical focus must be provisional alignment.
2) This adjustment should be performed after the raster slant, the horizontal and the vertical adjustment.
3) Tune the TV set to receive a digital pattern.
4) The convergence must be corrected.
Press the buttons of Remote Controller for adjustment (SVC → ≡M →5→OK→ ≡M) to reset the convergence.

2. Adjustment

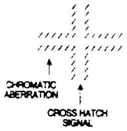
1) Turn the centering magnet of Green CRT so that the center of video signal correspond to geometrical center of screen.
2) Tune the TV set to receive cross hatch signal and turn the centering magnet of Red & Blue so that the center of cross hatch pattern correspond to Green center.

●Lens and Electrical Focus Adjustment

1. Preliminary steps

1) The electrical focus, the raster slant and position must be provisional alignment.
2) This adjustment should be performed after warming up for 30 minutes and in the dark room.
3) Tune the TV set cross hatch pattern.
4) Screen the optional two lens with a cover so that the single color is appeared on the screen.
5) When turn the light the lens at front, chromatic aberration which appeared in bright line of cross-Hatch signal changed as below.

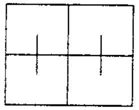
Lens	Change of chromatic aberration
Red	Orange → Scarlet
Green	Blue → Red
Blue	Purple → Green



※ After focus adjustment, fix screw about 12~17kg.cm.

2. G-lens Adjustment

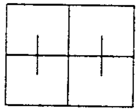
1) Turn the lens until the chromatic aberration changed 'Blue' to 'Red point'.
2) Viewing the all screen, in no case of the chromatic aberration appeared slimly within 3.5 cross-Hatch of the picture center. At this time, in case that the red chromatic aberration's bright line isn't equal, adjust G-lens so that the red chromatic aberration is appeared more than previous time.



3) Switching the signal to digital pattern and operate adjustment minutely. At this time, adjust it by using the revolution pattern of circumferencial picture's small circle.
4) Adjust G-focus control volume of focus pack so that the external big circle's part appeared cleary.
5) Adjust accurately by repeat the upper control.
6) Especially, noting to the G-light because it influenced on picture's function.

3. R-lens Adjustment

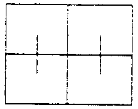
1) Turn the lens until the chromatic aberration changed orange to scarlet.
2) Adjust the chromatic aberration so that it located center correctly.



3) Switching the signal to digital pattern and adjust it as same method of G-lens.
4) Adjust as same method of G-lens with Red focus control volume of focus pack.

4. Blue lens Adjustment

1) Turn the lens until the chromatic aberration changed purple to green which of 3.5 Cross-hatch part from picture's center toward left.
2) Adjust the chromatic aberration become center of purple and green.



3) Turn the VR to clockwise so that the thickness of B-bright line thicker than G-bright line as much as times of 1.3 ±0.2 after control method as same of G-focus by B-focus VR of focus pack.
4) Remove lens cover after adjusting all lens (R.G.B) and receive cross hatch signal, observing condition of whole screen's condition.

●Convergence Adjustment

1. Preliminary steps

1) This adjustment should be performed after raster slant, raster position, horizontal and vertical adjustment.
2) This adjustment should be performed after warming up 30 minutes.
3) Tune the TV set cross-hatch pattern.
4) Adjust for both PAL(SECAM) and NTSC system.
5) Use the jig screen with the cross hatch pattern for each mode.

2. Convergence Key(Button)

1) Convergence Mode : ≡M
2) Phase Adjustment : 95
3) Pattern Position Adjustment : 94
4) Phase/Pattern Position Save : 92
5) Cursor Color Selection : TV/AV
6) Cursor Movement/Adjustment Selection : OK
7) Adjustment DATA Save : 91

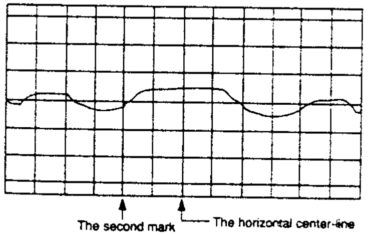
●Mode Adjustment

1. Preliminary steps

Press the buttons SVC & ≡M of Remote Controller for adjustment to get into the convergence adjustment mode.

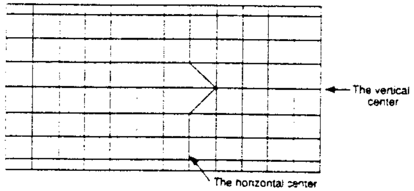
2. Phase Adjustment

1) Press the buttons 9 & 5 to get into the phase adjustment mode.



2. Horizontal Phase Adjustment.
Press the volume ◀ ▶button and move the convex part to the middle of TV screen.

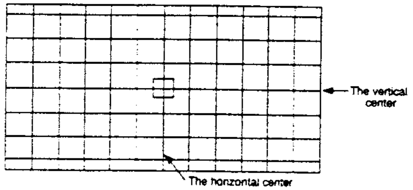
3. Vertical Phase Adjustment
Press the channel ▲ ▼button and move the convex part to the middle of TV screen.



Press the OK button to escape from the adjustment.

3. Pattern Position Adjustment

Press the buttons 9 & 4 to get into the pattern movement mode.
Press the volume ◀ ▶button & channel ▲/▼button and move the cursor to the middle of TV screen.



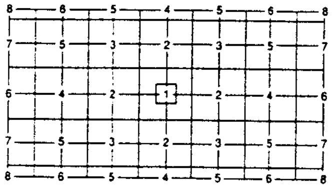
4. Phase/Pattern Position Save

Press buttons 9 & 2 and OK.

5. Green Convergence Adjustment

1) Press TV/AV button and select the green cursor.
2) Press the volume ◀/▶button & channel ▲/▼button and adjust the green pattern & screen jig pattern.
3) If necessary, cover the R lens & B lens.

※ Cursor flickers in the adjustment mode and stops in the cursor position movement mode.
Use OK button to toggle the cursor position movement mode and adjustment mode.
Adjust and move outskirts from center.



Number is the order for adjustment position.
Adjust anyone first for the same number.

6. Red Convergence Adjustment

1) Press TV/AV button and select the red cursor.
2) If necessary, cover B lens.
3) Adjust as same as the green convergence adjustment and coincide the red pattern with the green pattern.

7. Blue Convergence Adjustment

1) Press TV/AV button and select the blue cursor.
2) Adjust as same as the red convergence adjustment and coincide the blue pattern with the green pattern.

8. Adjustment DATA Save

Press buttons 9 & 1 and save adjustment DATA.

9. Press ≡M button to escape from the adjustment.

● White Balance Adjustment

1. Used Tools : Brightness meter (TOPCON BM-7)

2. Condition

1) It must be operated at a place of the darkroom.
2) This adjustment must be performed after focus adjustment finished.
3) Brightness meter must be at a place of 3[m] from the middle of optical screen.
4) Adjust focus of brightness meter to optical screen. And adjust the field angle. (1°)

3. Adjustment

1) Receive the white balance signal of 100%.
2) Select SVC Mode by SVC Remote Controller.
3) Adjust G-GN & B-GN and X=0.280 & Y=0.300. (Deviation : ±0.005)

● Sub White Balance Adjustment

1) Press OK buttons on both of TV and Remote Controller at the same time to get into SVC mode.
2) Press the Yellow button to find a TABLE of below 3 tables.

<Table 1>

SVC 3 MODE	
H-CEN	09
SBRIGHT	50
STINT	50

<Table 2>

SVC 3 MODE	
Rcut	128
Gcut	141
Bcut	112
G-GN	138
B-GN	111

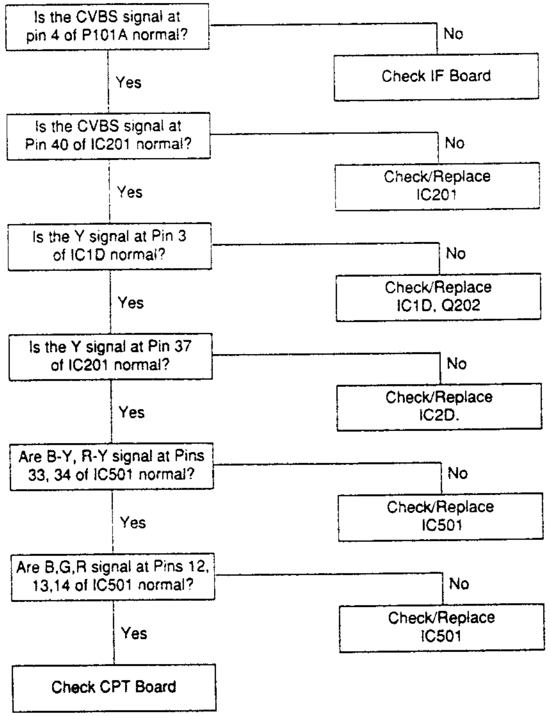
<Table 3>

SVC 3 MODE	
FM PRE	19
NC PRE	74
SC PRE	36
SC VOL	50
PH VOL	50

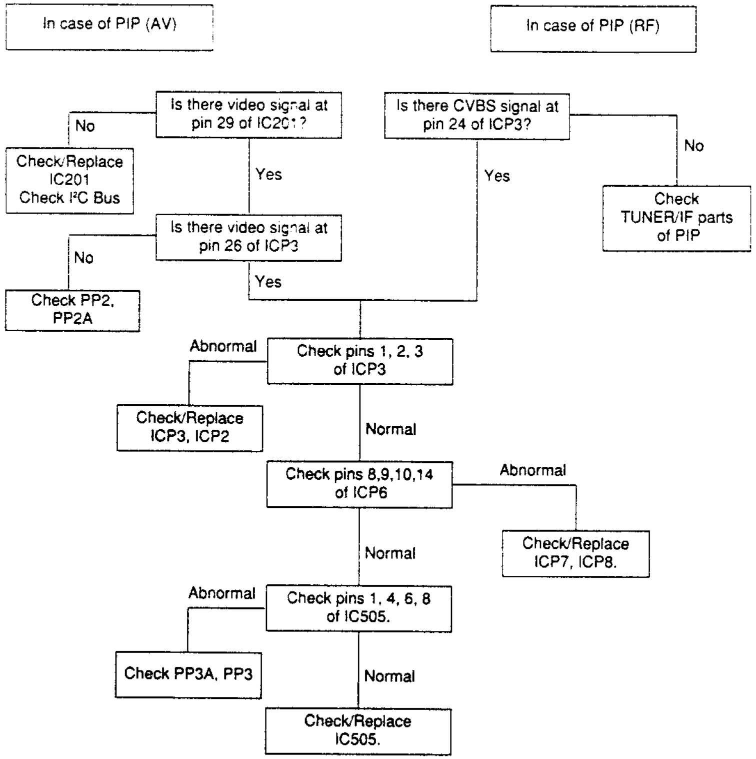
3) Select a menu with channel up/down button and adjust the data with volume ▲/▼button.
4) Press OK button to save the data.
5) Press TV/AV button to escape the SVC mode.

TROUBLESHOOTING

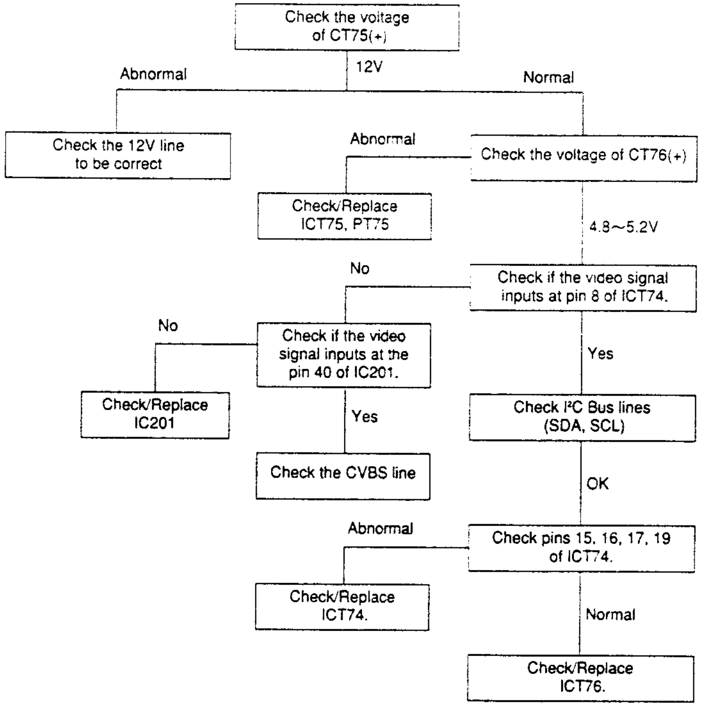
NO PICTURE/ NO COLOR


Is the CVBS signal at pin 4 of P101A normal?
No
Check IF Board
Yes
Is the CVBS signal at Pin 40 of IC201 normal?
No
Check/Replace IC201
Yes
Is the Y signal at Pin 3 of IC1D normal?
No
Check/Replace IC1D, Q202
Yes
Is the Y signal at Pin 37 of IC201 normal?
No
Check/Replace IC2D.
Yes
Are B-Y, R-Y signal at Pins 33, 34 of IC501 normal?
No
Check/Replace IC501
Yes
Are B,G,R signal at Pins 12, 13,14 of IC501 normal?
No
Check/Replace IC501
Yes
Check CPT Board

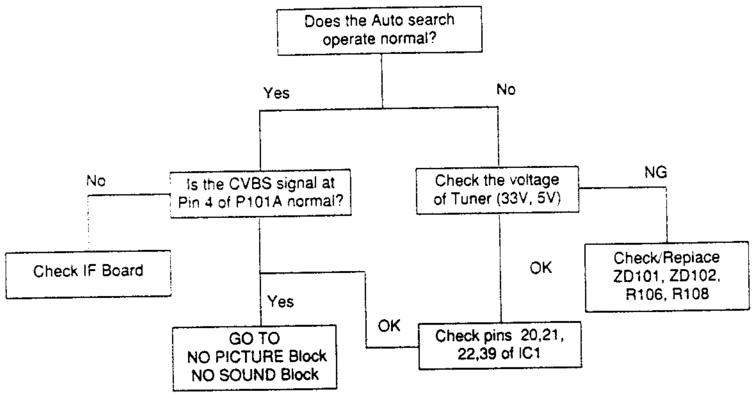
NO PIP


In case of PIP (AV)
In case of PIP (RF)
Is there video signal at pin 29 of IC201?
No
Check/Replace IC201 Check I²C Bus
Yes
Is there video signal at pin 26 of ICP3
No
Check PP2, PP2A
Yes
Is there CVBS signal at pin 24 of ICP3?
Yes
No
Check TUNER/IF parts of PIP
Abnormal
Check pins 1, 2, 3 of ICP3
Check/Replace ICP3, ICP2
Normal
Check pins 8,9,10,14 of ICP6
Abnormal
Check/Replace ICP7, ICP8.
Normal
Abnormal
Check pins 1, 4, 6, 8 of IC505.
Check PP3A, PP3
Normal
Check/Replace IC505.

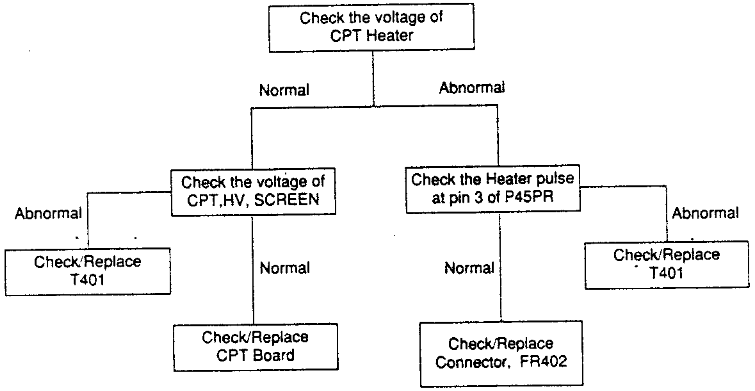
NO TELETEXT


Check the voltage of CT75(+)
Abnormal
12V
Normal
Check the 12V line to be correct
Abnormal
Check the voltage of CT76(+)
Check/Replace ICT75, PT75
4.8~5.2V
No
Check if the video signal inputs at pin 8 of ICT74.
No
Check if the video signal inputs at the pin 40 of IC201.
Check/Replace IC201
Yes
Check the CVBS line
Yes
Check I²C Bus lines (SDA, SCL)
OK
Abnormal
Check pins 15, 16, 17, 19 of ICT74.
Check/Replace ICT74.
Normal
Check/Replace ICT76.

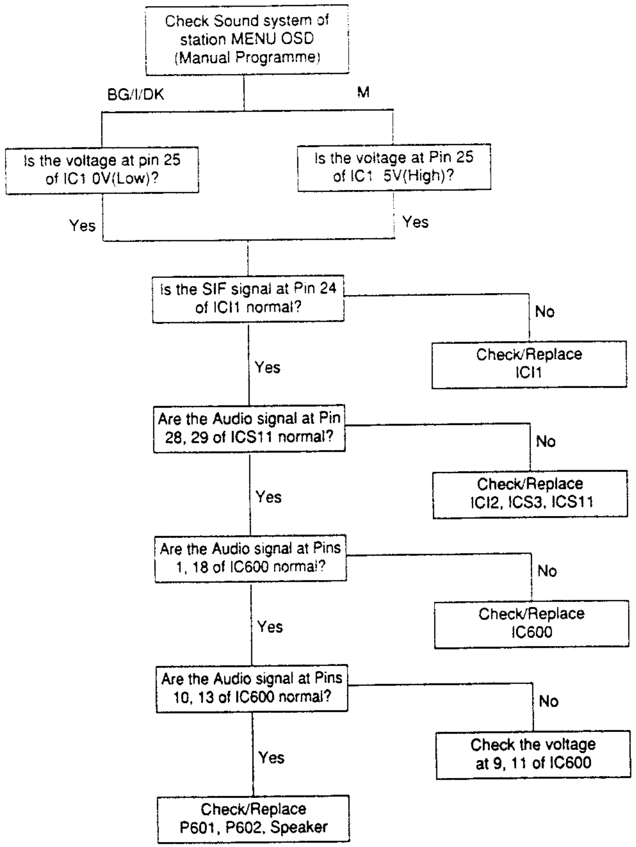
NO PICTURE/NO SOUND (RASTER OK)


Does the Auto search operate normal?
Yes
No
No
Is the CVBS signal at Pin 4 of P101A normal?
Check the voltage of Tuner (33V, 5V)
NG
Check IF Board
Yes
OK
Check/Replace ZD101, ZD102, R106, R108
OK
GO TO NO PICTURE Block NO SOUND Block
Check pins 20,21, 22,39 of IC1

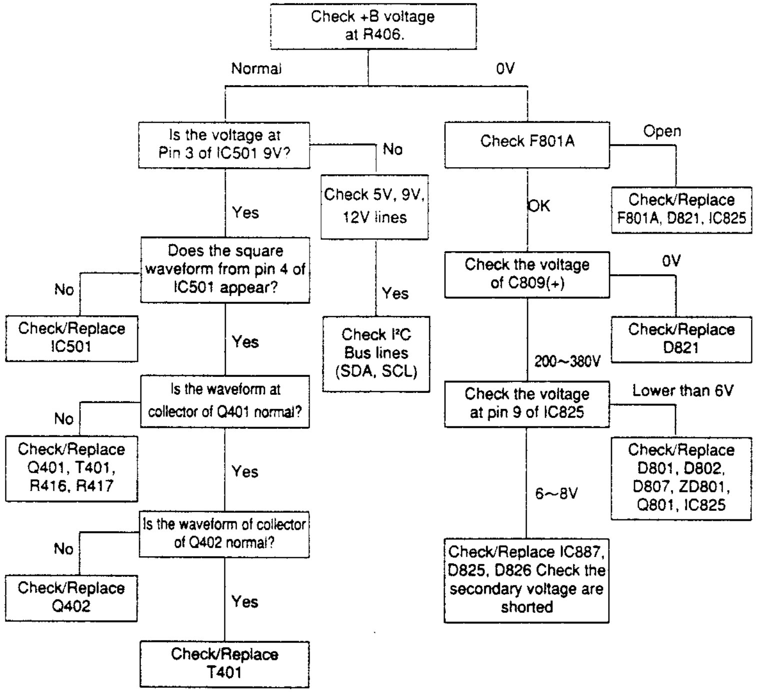
NO RASTER (SOUND OK)


Check the voltage of CPT Heater
Normal
Abnormal
Check the voltage of CPT,HV, SCREEN
Check the Heater pulse at pin 3 of P45PR
Abnormal
Abnormal
Check/Replace T401
Normal
Normal
Check/Replace T401
Check/Replace CPT Board
Check/Replace Connector, FR402

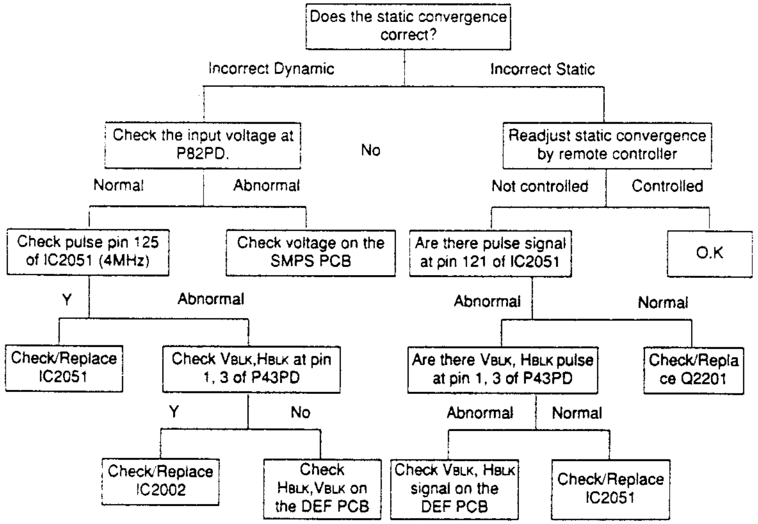
NO SOUND (PICTURE OK)


Check Sound system of station MENU OSD (Manual Programme)
BG/I/DK
M
Is the voltage at pin 25 of IC1 0V(Low)?
Is the voltage at Pin 25 of IC1 5V(High)?
Yes
Yes
Is the SIF signal at Pin 24 of ICI1 normal?
No
Check/Replace ICI1
Yes
Are the Audio signal at Pin 28, 29 of ICS11 normal?
No
Check/Replace ICI2, ICS3, ICS11
Yes
Are the Audio signal at Pins 1, 18 of IC600 normal?
No
Check/Replace IC600
Yes
Are the Audio signal at Pins 10, 13 of IC600 normal?
No
Check the voltage at 9, 11 of IC600
Yes
Check/Replace P601, P602, Speaker

NO RASTER

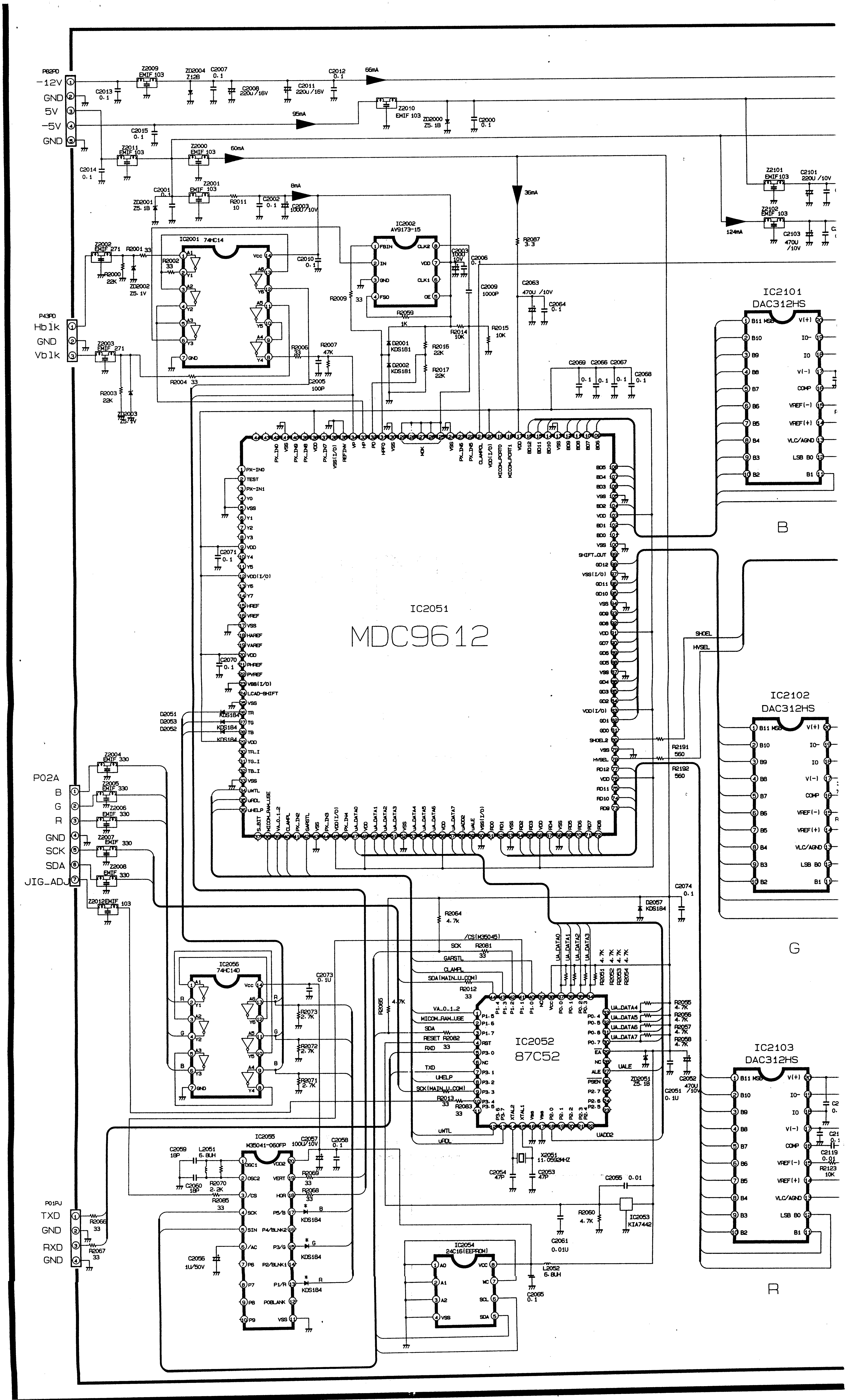

Check +B voltage at R406.
Normal
0V
Is the voltage at Pin 3 of IC501 9V?
No
Check 5V, 9V, 12V lines
Yes
Check I²C Bus lines (SDA, SCL)
Yes
Does the square waveform from pin 4 of IC501 appear?
No
Check/Replace IC501
Yes
Is the waveform at collector of Q401 normal?
No
Check/Replace Q401, T401, R416, R417
Yes
Is the waveform of collector of Q402 normal?
No
Check/Replace Q402
Yes
Check/Replace T401
Check F801A
Open
Check/Replace F801A, D821, IC825
OK
Check the voltage of C809(+)
0V
Check/Replace D821
200~380V
Check the voltage at pin 9 of IC825
Lower than 6V
Check/Replace D801, D802, D807, ZD801, Q801, IC825
6~8V
Check/Replace IC887, D825, D826 Check the secondary voltage are shorted

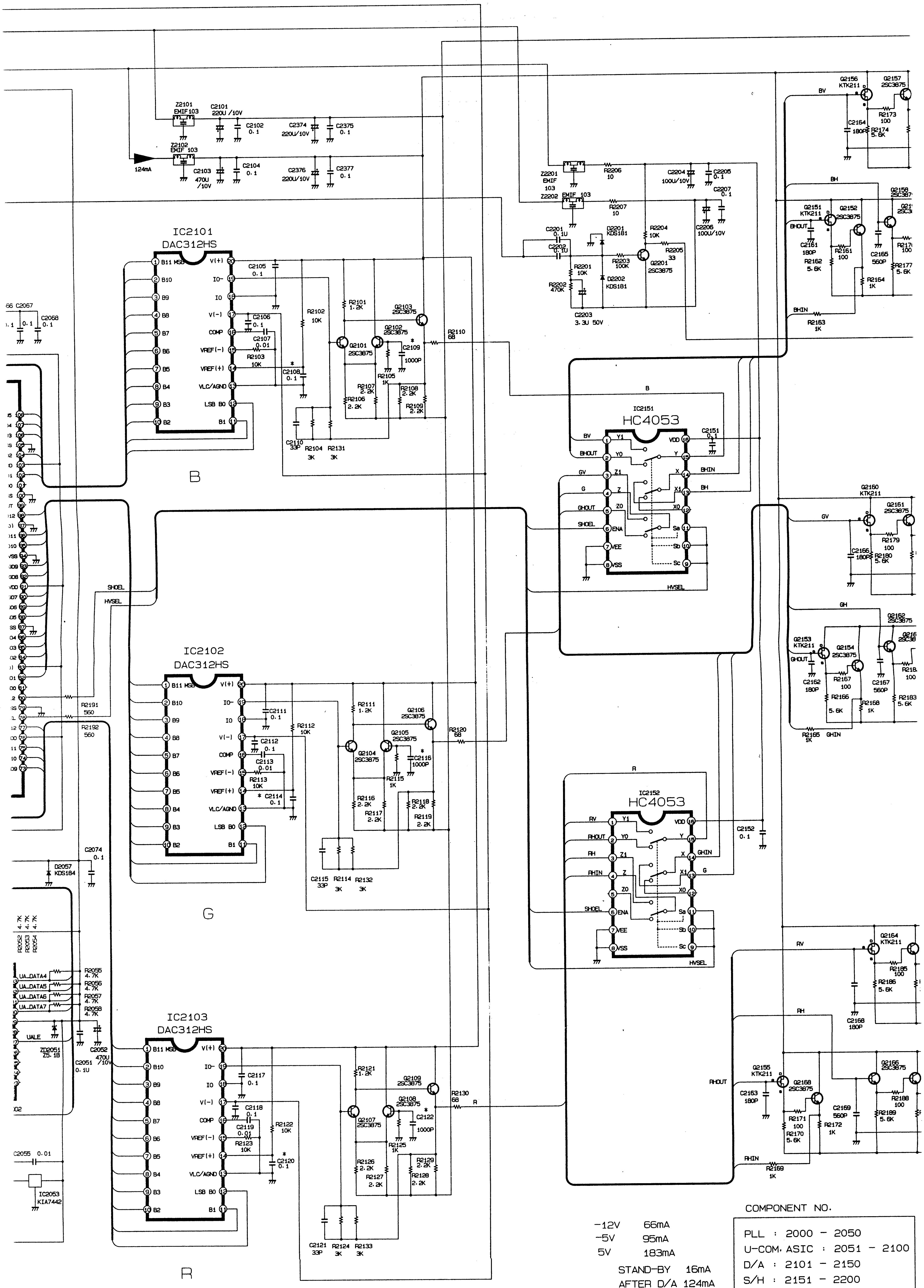
INCORRECT CONVERGENCE


Does the static convergence correct?
Incorrect Dynamic
Incorrect Static
Check the input voltage at P82PD.
No
Normal
Abnormal
Check pulse pin 125 of IC2051 (4MHz)
Check voltage on the SMPS PCB
Y
Abnormal
Check/Replace IC2051
Check VBLK,HBLK at pin 1, 3 of P43PD
Y
No
Check/Replace IC2002
Check HBLK,VBLK on the DEF PCB
Readjust static convergence by remote controller
Not controlled
Controlled
Are there pulse signal at pin 121 of IC2051
O.K
Abnormal
Normal
Are there VBLK, HBLK pulse at pin 1, 3 of P43PD
Check/Replace Q2201
Abnormal
Normal
Check VBLK, HBLK signal on the DEF PCB
Check/Replace IC2051

COMPONENT LOCATION GUIDE(SIGNAL)

AC1 ....F1
AR1 ....G1
AR2 ....F1
C1 ....G1
C2 ....G1
C3...........E1
C4...........F1
C6...........E2
C7 ....G1
C8...........E2
C9...........E2
C10.........E2
C11.........E2
C12.........E2
C13.........E2
C14.........F2
C17.........F2
C18.........F2
C24 ....G2
C25 ....G2
C26.........E2
C28 ....G1
C29.........F1
C30.........E2
C101.......B1
C102 ......C1
C103.......B1
C104.......B1
C105.......B1
C106 ......C1
C107.......A1
C108.......A1
C109.......A3
C110.......A4
C151.......B3
C152.......B3
C153.......B3
C154.......B3
C155.......B3
C156.......B3
C157.......B3
C158.......B3
C241 ......D2
C242 ......D3
C243.......B3
C244 ......C2
C245 ......C3
C371.......E5
C372.......F4
C373.......F4
C471.......F5
C472.......F5
C473.......F5
C474.......F5
C475.......F4
C476.......F4
C477.......E4
C478.......E4
C501.......F5
C502.......F4
C503.......F4
C504 ......C4
C505 ......D4
C506.......F5
C507 ......D4
C508.......F5
C509.......F5
C510 ......D5
C511.......E5
C512.......E5
C513 ......G4
C514 ......G4
C515 ......G4
C516 ......G4
C517 ......G4
C518 ......G4
C519 ......G4
C520 ......G4
C521 ......G4
C522.......F4
C523.......F4
C524.......F4
C525.......F4
C526.......F4
C527.......F4
C528 ......G3
C529 ......G3
C530 ......G4
C531 ......G4
C533 ......G5
C535.......F4
C536 ......D5
C538 ......G5
C539 ......D4
C540 ......D4
C541 ......D4
C542 ......D4
C614 ......C4
C618 ......C4
C619 ......C4
C621.......B4
C622 ......C4
C623.......B4
C624.......B4
C625.......B4
C626.......B4
C627.......B4
C628 ......C4
C629 ......D5
C630 ......D5
C631 ......C4
C636.......B4
C637.......B4
C638.......B4
C639.......B4
C640.......A5
C641 ......C4
CT75 ......E3
CT76 ......E3
CT77 ......E3
CT79.......F3
CT80.......F3
CT81.......F3
CT82.......F3
CT83.......F3
CT84.......F3
CT85 ......E3
CT86 ......E3
CT87 ......E3
CT88.......F3
CT90.......F3
CT92.......F3
CT94.......F3
CT95 ......E3
D1...........E1
D2...........E2
D3 ....G1
D4...........F2
D5...........F2
D6...........F2
D7...........F2
D8...........F2
D471.......E1
D472.......E1
D501.......F5
D502 ......D4
D503 ......G5
D504 ......D4
D505 ......D4
D506 ......D4
D604 ......C4
D605.......A4
D606 ......C4
D607 ......C4
DT75 ......E3
G1 ....A4
G2 ....A4
G3 ....A3
G4 ....A2
IC1 ....G1
IC2..........E1
IC3..........E2
IC501 ......F4
IC502 .....G4
IC503 .....G4
IC505 .....D4
IC506......F5
IC600 .....C5
ICT74 .....E3
ICT75 .....E3
ICT76 .....D4
JA201 .....A3
L1...........G1
L2 ....F2
L3...........G2
L4 ....F2
L5 ....F1
L6...........G1
L101 ....C1
L151 ....C3
L152.......C3
L501 ....F4
L502.......G5
L503.......G4
L504.......G4
L505.......G3
L506.......G3
L507.......D4
LT75.......E3
P601.......A4
P602.......A5
P101A C2
P102A B2
P103A B2
P104A A2
P201A A2
P202A B2
P203A C2
P301A G1
P302A G3
P303A.....F1
P401A G5
P402A.....F5
P403A E1
P44A A4
P83PS....D5
PP1A......B3
PP2A......C3
PP3A......D3
Q1 ....G1
Q2 ....E2
Q3 ....G2
Q4 ....G3
Q5 ....G2
Q6 ....G2
Q7 ....G1
Q101 ......B1
Q203 ......D3
Q301 ......E4
Q302 ......E5
Q303 ......E5
Q501 ......D3
Q503 ......D4
Q504 ......G5
Q505 ......G5
Q606 ......B4
Q607 ......C4
Q608 ......C4
QT1 ....F3
QT2........G3
R1 ....G1
R2...........G1
R3...........G1
R4...........G3
R6...........G1
R7 ....G1
R8...........F1
R9...........E1
R10.........F1
R11.........E1
R12.........E1
R13 ....G1
R14.........E2
R15.........E1
R16.........E1
R18 ....D2
R19.........F2
R20.........E2
R21.........E2
R22.........E2
R23 ....G1
R24..........F1
R25..........F2
R26 ....G2
R27.........F2
R28 ....G2
R29.........F2
R30 ....G2
R31 ....F2
R32 ....G3
R33.........F1
R34.........F2
R35.........F1
R36.........F1
R37.........E1
R38.........E1
R39.........F2
R40.........F2
R41 ....F1
R42 ....G2
R43 ....G2
R44 ....G2
R45 ....G2
R46 ....G2
R47 ....G2
R48.........F1
R49.........F1
R50.........F1
R51 ....F1
R52 ....G2
R53.........F1
R54 ....D1
R55.........E2
R56.........E2
R57 ....G2
R58 ....G2
R59 ....G2
R60 ....G1
R61 ....F2
R62.........F2
R63 ....G2
R67 ....G2
R68 ....G3
R69 ....G2
R70 ....G2
R71 ....D2
R72 ....D2
R73.........E2
R74.........E2
R101 ......B1
R102.......B1
R103.......B1
R104 ......C1
R105 ......C1
R106 ......D1
R107.......A3
R108 ......D1
R109.......B1
R151 ......C3
R152 ......C3
R153 ......C3
R154 ......B3
R155.......B3
R223.......A3
R226.......A2
R227.......A3
R248.......A2
R251.......A2
R252.......A3
R257 ......D2
R258 ......D2
R265 ......C3
R371.......F4
R372.......E4
R373.......E5
R374.......E4
R375.......E5
R376.......E5
R377 ......D3
R378.......E5
R471.......E5
R472.......E5
R473.......F5
R474.......F5
R475.......F4
R476.......E4
R501.......F5
R502.......E4
R503.......E4
R504.......F5
R505.......F5
R506.......F5
R507 ......G5
R508.......F5
R509 ......G5
R510 ......G5
R511 ......G5
R512 ......G5
R513 ......D3
R514 ......D3
R516 ......D5
R517 ......D5
R518 ......D5
R519 ......G4
R520.......F4
R521 ......D4
R524 ......D4
R525 ......D5
R526 ......D5
R527 ......D5
R528 ......D5
R530 ......G5
R531 ......G5
R532 ......G4
R533 ......G5
R536 ......D4
R537 ......D4
R538 ......D4
R539 ......D4
R540 ......D4
R541 ......D4
R542 ......G5
R543.......F5
R544 ......G5
R545 ......G5
R546 ......D4
R547 ......D4
R627.......B4
R628.......B4
R633 ......C4
R634 ......C4
R635 ......C4
R637 ......C4
R638 ......C4
R639 ......C4
R640 ......C4
R641.......B4
R642.......B4
R643.......B4
R644.......B4
R645 ......C4
R646 ......C4
R647.......B4
R648 ......C4
R649.......B4
R650.......B4
R651 ......D5
R652 ......D5
R653.......A4
R654.......A4
R658.......B4
R659.......A5
R666 ......C4
RL601.....A4
RT75 ......E3
RT76.......F3
RT77.......F3
RT78.......F3
RT79 ......F3
RT80......G3
RT81 ......G3
RT83.......F3
RT84.......F3
RT85.......F3
RT87.......F3
RT88.......F3
RT89.......F3
RT90.......F3
RT91.......F3
RT92.......F3
RT93......G3
RT94......G3
RT96......G3
RT97......G3
RT98 ......E3
SP101 ....A3
TU101 ....A1
TU151 ....A3
X1 ....E2
X501 ......F4
XT75.......E3
ZD1 ....G1
ZD8 ....E2
ZD101 ....C1
ZD102 ....B1
ZD103 ....A3
ZD151 ....B3
ZD301 ....E5
ZD471 ....E5
ZD472.....F5
ZD501 ....E4
ZD502 ....E4


P82P0
-12V
GND
5V
-5V
GND
Z2009 EMIF 103
ZD2004 Z12B
C2007 0.1
C2012 0.1
66mA
C2013 0.1
C2008 220U/16V
C2011 220U/16V
Z2010 EMIF 103
ZD2000 Z5.1B
C2000 0.1
95mA
C2015 0.1
Z2011 EMIF 103
Z2000 EMIF 103
60mA
C2014 0.1
C2001 0.1
Z2001 EMIF 103
R2011 10
C2002 0.1
C2003 1000/10V
8mA
ZD2001 Z5.1B
36mA
R2087 3.3
Z2101 EMIF 103
C2101 220U/10V
Z2102 EMIF 103
C2103 470U/10V
124mA
IC2001 74HC14
Z2002 EMIF 271
R2001 33
R2002 33
R2000 22K
ZD2002 Z5.1V
C2010 0.1
IC2002 AV9173-15
FBIN
IN
GND
FS0
CLK2
VDD
CLK1
OE
C2003 1000 10V
C2006 0.1
C2009 1000P
R2009 33
R2059 1K
R2014 10K
R2015 10K
C2063 470U/10V
C2064 0.1
P43P0
Hblk
GND
Vblk
Z2003 EMIF 271
R2006 33
R2007 47K
D2001 KDS181
D2002 KDS181
R2016 22K
R2017 22K
R2003 22K
ZD2003 Z5.1V
R2004 33
C2005 100P
C2069 0.1
C2066 0.1
C2067 0.1
C2068 0.1
IC2101 DAC312HS
B11 MSB
B10
B9
B8
B7
B6
B5
B4
B3
B2
V(+)
IO-
IO
V(-)
COMP
VREF(-)
VREF(+)
VLC/AGND
LSB B0
B1
B
IC2051
MDC9612
C2071 0.1
C2070 0.1
D2051
D2053
D2052
KDS184
SHOEL
HVSEL
R2191 560
R2192 560
IC2102 DAC312HS
G
P02A
B
G
R
GND
SCK
SDA
JIG_ADJ
Z2004 EMIF 330
Z2005 EMIF 330
Z2006 EMIF 330
Z2007 EMIF 330
Z2008 EMIF 330
Z2012 EMIF 103
C2074 0.1
D2057 KDS184
R2064 4.7K
/CS(M35045)
SCK
R2081 33
GARSTL
CLAMPL
SDA(MAIN_U_COM)
R2012 33
UA_DATA0
UA_DATA1
UA_DATA2
UA_DATA3
R2051 4.7K
R2052 4.7K
R2053 4.7K
R2054 4.7K
IC2056 74HC14D
C2073 0.1U
R2073 2.7K
R2072 2.7K
R2071 2.7K
R2065 4.7K
VA_0_1_2
MICOM_RAM_USE
RESET R2082 33
RXD
TXD
UHELP
SCK(MAIN_U_COM)
R2013 33
R2083 33
IC2052
87C52
UA_DATA4
UA_DATA5
UA_DATA6
UA_DATA7
R2055 4.7K
R2056 4.7K
R2057 4.7K
R2058 4.7K
UALE
ZD2051 Z5.1B
C2051 0.1U
C2052 470U/10V
uWTL
uRDL
UADD2
X2051 11.0592MHZ
C2054 47P
C2053 47P
IC2103 DAC312HS
C2119 0.01
R2123 10K
R
IC2055 M35041-060FP
C2059 18P
L2051 6.8UH
C2057 100U/10V
C2058 0.1
C2060 18P
R2070 2.2K
R2069 33
R2068 33
R2085 33
KDS184
P01PJ
TXD
GND
RXD
GND
R2066 33
R2067 33
C2056 1U/50V
C2055 0.01
R2060 4.7K
C2061 0.01U
IC2053 KIA7442
IC2054 24C16(EEPROM)
L2052 6.8UH
C2065 0.1

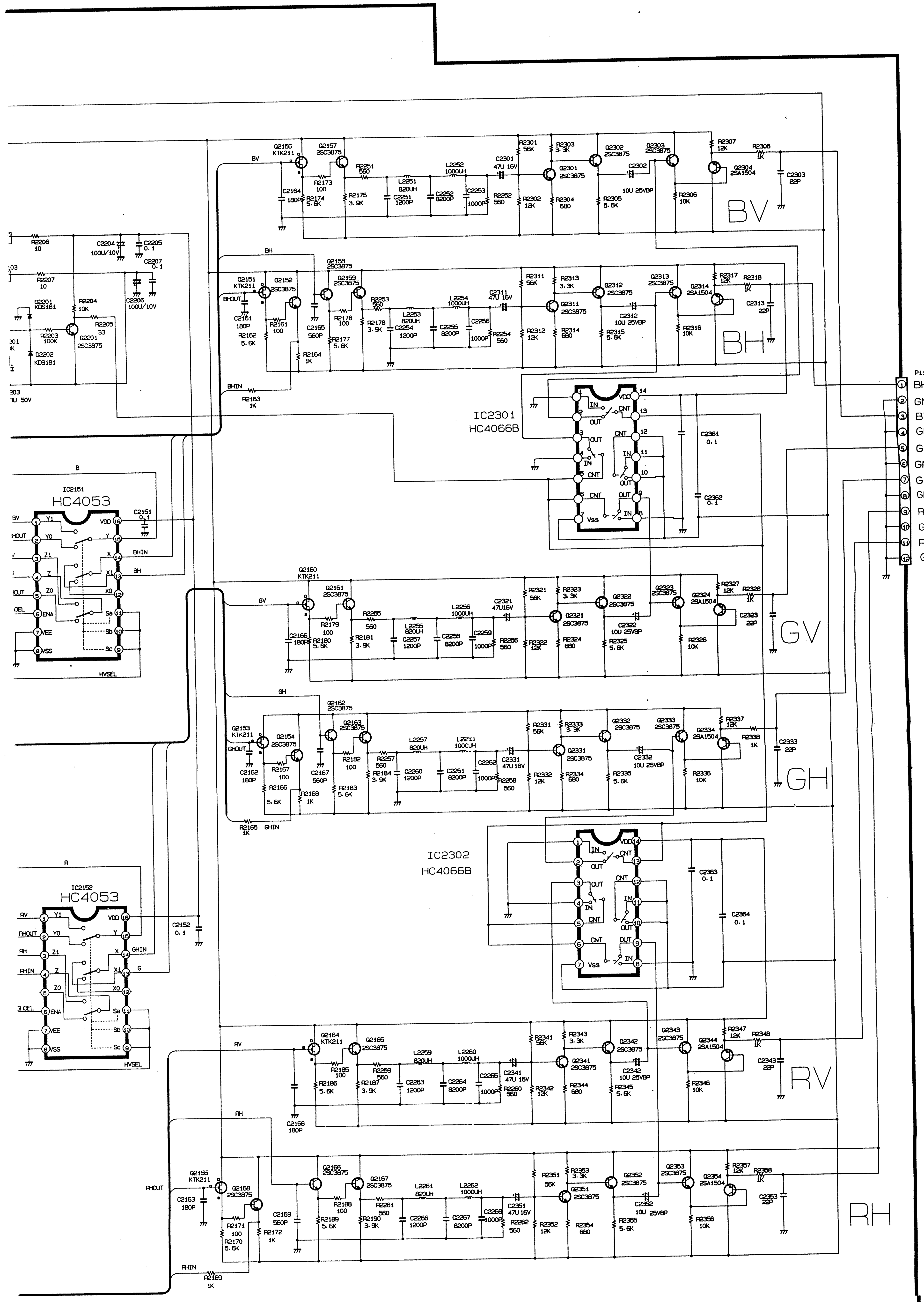

IC2101
DAC312HS
IC2102
DAC312HS
IC2103
DAC312HS
IC2151
HC4053
IC2152
HC4053
B
G
R
Z2101 EMIF 103
Z2102 EMIF 103
Z2201 EMIF 103
Z2202 EMIF 103
C2101 220U /10V
C2103 470U /10V
C2374 220U/10V
C2376 220U/10V
124mA
Q2201 2SC3875
D2201 KDS181
D2202 KDS181
C2203 3.3U 50V
C2204 100U/10V
C2206 100U/10V
Q2101 2SC3875
Q2102 2SC3875
Q2103 2SC3875
Q2104 2SC3875
Q2105 2SC3875
Q2106 2SC3875
Q2107 2SC3875
Q2108 2SC3875
Q2109 2SC3875
Q2151 KTK211
Q2152 2SC3875
Q2153 KTK211
Q2154 2SC3875
Q2155 KTK211
Q2156 KTK211
Q2157 2SC3875
Q2160 KTK211
Q2161 2SC3875
Q2164 KTK211
Q2166 2SC3875
Q2168 2SC3875
BV
BH
BHOUT
BHIN
GV
G
GHOUT
GHIN
GH
RV
RH
RHOUT
RHIN
SHOEL
HVSEL
IC2053 KIA7442
ZD2051 Z5.1B
D2057 KDS184
UA_DATA4
UA_DATA5
UA_DATA6
UA_DATA7
UALE

-12V 66mA
-5V 95mA
5V 183mA

STAND-BY 16mA
AFTER D/A 124mA
BEFORE D/A 60mA

COMPONENT NO.

PLL : 2000 - 2050
U-COM, ASIC : 2051 - 2100
D/A : 2101 - 2150
S/H : 2151 - 2200
CLAMP : 2201 - 2250
LPF : 2251 - 2300
OUT : 2300 - 2500


BV
BH
GV
GH
RV
RH
IC2301
HC4066B
IC2302
HC4066B
IC2151
HC4053
IC2152
HC4053
P110PD
BH
GND
BV
GND
GH
GND
GV
GND
RH
GND
RV
GND
HVSEL
BHIN
GHIN
RHIN
BHOUT
GHOUT
RHOUT
Q2156 KTK211
Q2157 2SC3875
Q2301 2SC3875
Q2302 2SC3875
Q2303 2SC3875
Q2304 2SA1504
Q2151 KTK211
Q2152 2SC3875
Q2158 2SC3875
Q2159 2SC3875
Q2311 2SC3875
Q2312 2SC3875
Q2313 2SC3875
Q2314 2SA1504
Q2160 KTK211
Q2161 2SC3875
Q2321 2SC3875
Q2322 2SC3875
Q2323 2SC3875
Q2324 2SA1504
Q2153 KTK211
Q2154 2SC3875
Q2162 2SC3875
Q2163 2SC3875
Q2331 2SC3875
Q2332 2SC3875
Q2333 2SC3875
Q2334 2SA1504
Q2164 KTK211
Q2165 2SC3875
Q2341 2SC3875
Q2342 2SC3875
Q2343 2SC3875
Q2344 2SA1504
Q2155 KTK211
Q2168 2SC3875
Q2166 2SC3875
Q2167 2SC3875
Q2351 2SC3875
Q2352 2SC3875
Q2353 2SC3875
Q2354 2SA1504
Q2201 2SC3875
D2201 KDS181
D2202 KDS181
C2204 100U/10V
C2205 0.1
C2206 100U/10V
C2207 0.1
C2151 0.1
C2152 0.1
C2361 0.1
C2362 0.1
C2363 0.1
C2364 0.1

COMPONENT NO.

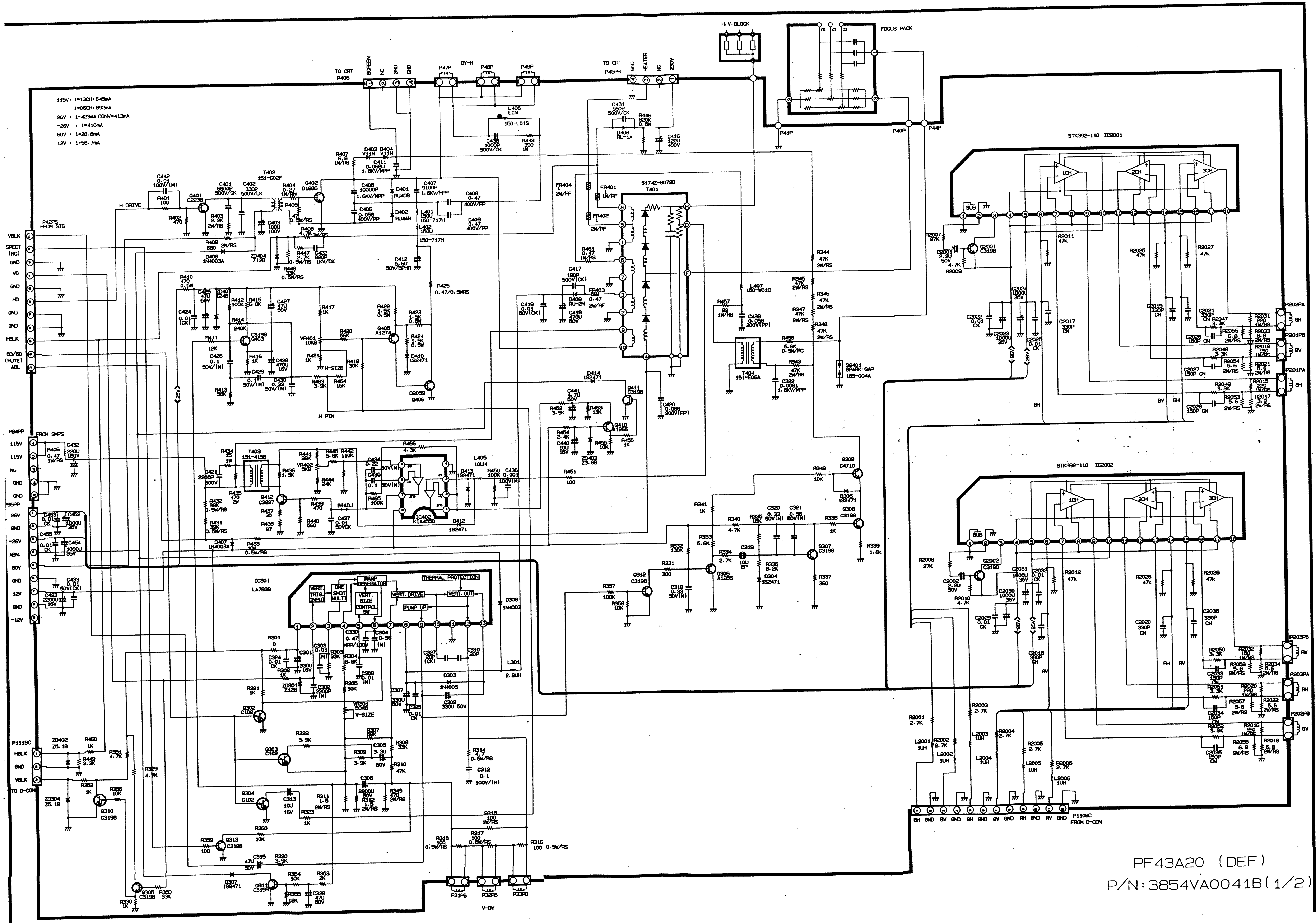
PLL : 2000 - 2050
U-COM. ASIC : 2051 - 2100
D/A : 2101 - 2150
S/H : 2151 - 2200
CLAMP : 2201 - 2250
LPF : 2251 - 2300
OUT : 2300 - 2500

-12V	66mA
-5V	95mA
5V	183mA

STAND-BY 16mA
AFTER D/A 124mA
BEFORE D/A 60mA

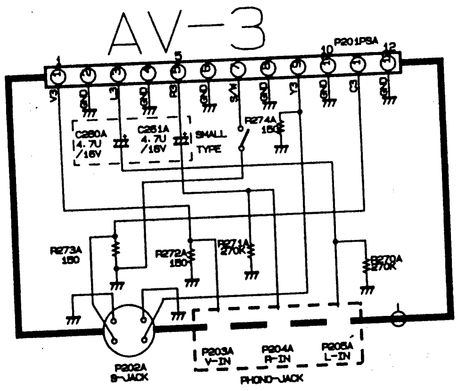
PF-43A20 (CONVERGENCE)

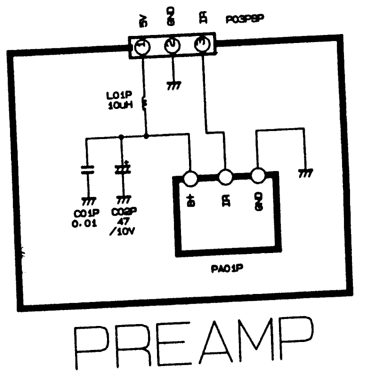
3854VA0041B (2/2)

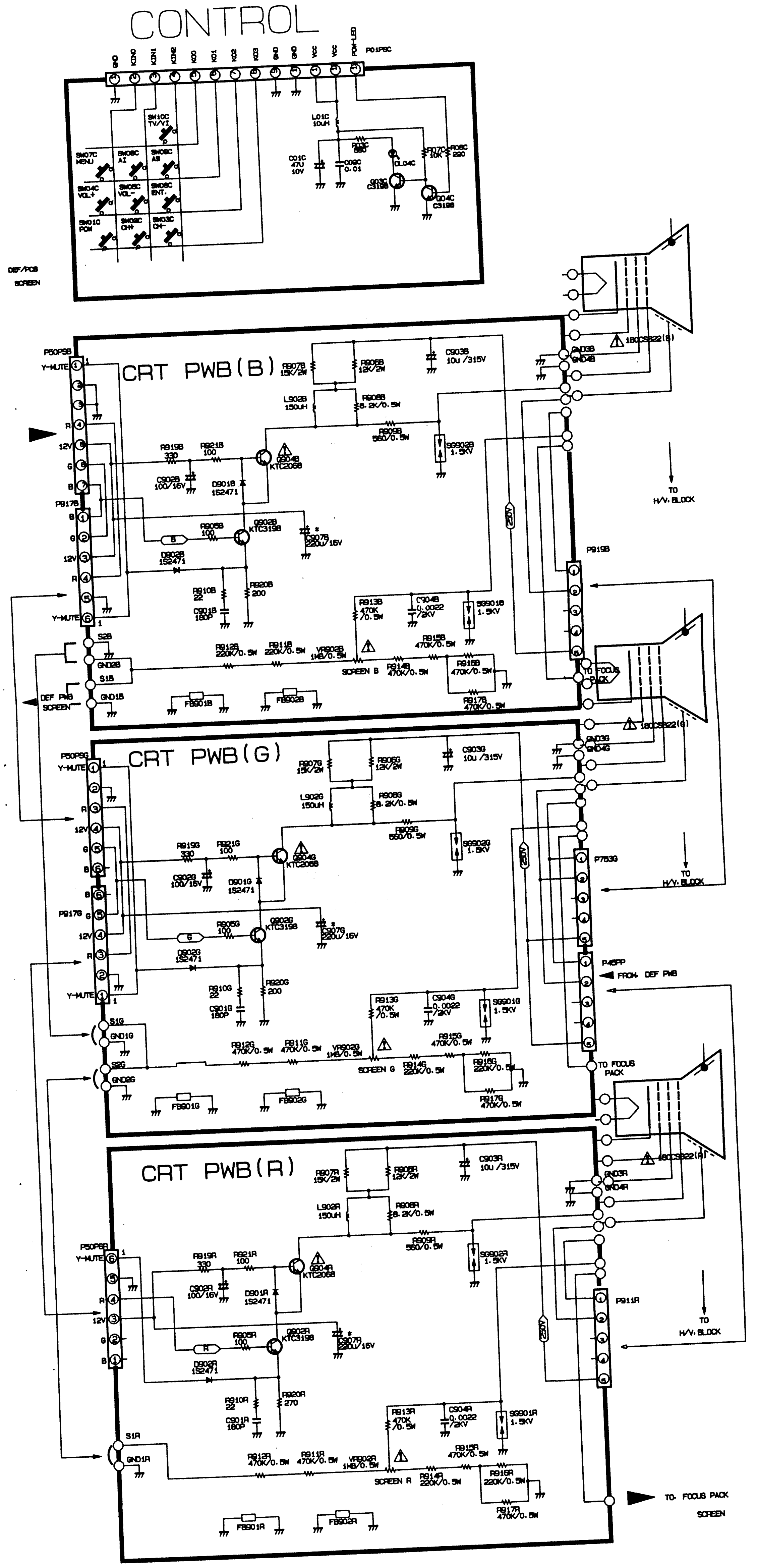

H.V. BLOCK
FOCUS PACK
TO CRT P406
SCREEN
NC
GND
DY-H
P47P
P48P
P49P
TO CRT P45PR
HEATER
230V
115V : 1=13CH:645mA
1=06CH:692mA
26V : 1=423mA CONV=413mA
-26V : 1=410mA
60V : 1=28.8mA
12V : 1=58.7mA
P42PS FROM SIG
VBLK
SPECT (NC)
VD
HD
HBLK
50/60 (MUTE)
ABL
H-DRIVE
T402 151-C02F
Q401 C2238
Q402 D1886
6174Z-6079D T401
L406 LIN
150-L01S
STK392-110 IC2001
STK392-110 IC2002
1CH
2CH
3CH
SUB
P84PP FROM SMPS
P85PP
T403 151-415B
IC402 KIA4558
H-SIZE
H-PIN
B+ADJ
IC301 LA7838
VERT. TRIG. INPUT
ONE SHOT MULTI
RAMP GENERATOR
VERT. SIZE CONTROL SW
VERT. DRIVE
VERT. OUT
PUMP UP
THERMAL PROTECTION
V-SIZE
T404 151-E06A
SG401 SPARK-GAP 165-004A
P111BC TO D-CON
P110BC FROM D-CON
BH GND BV GND GH GND GV GND RH GND RV GND
P202PA
P201PB
P201PA
P203PB
P203PA
P202PB
P31PB
P32PB
P33PB
V-DY
P41P
P40P
P44P

PF43A20 (DEF)

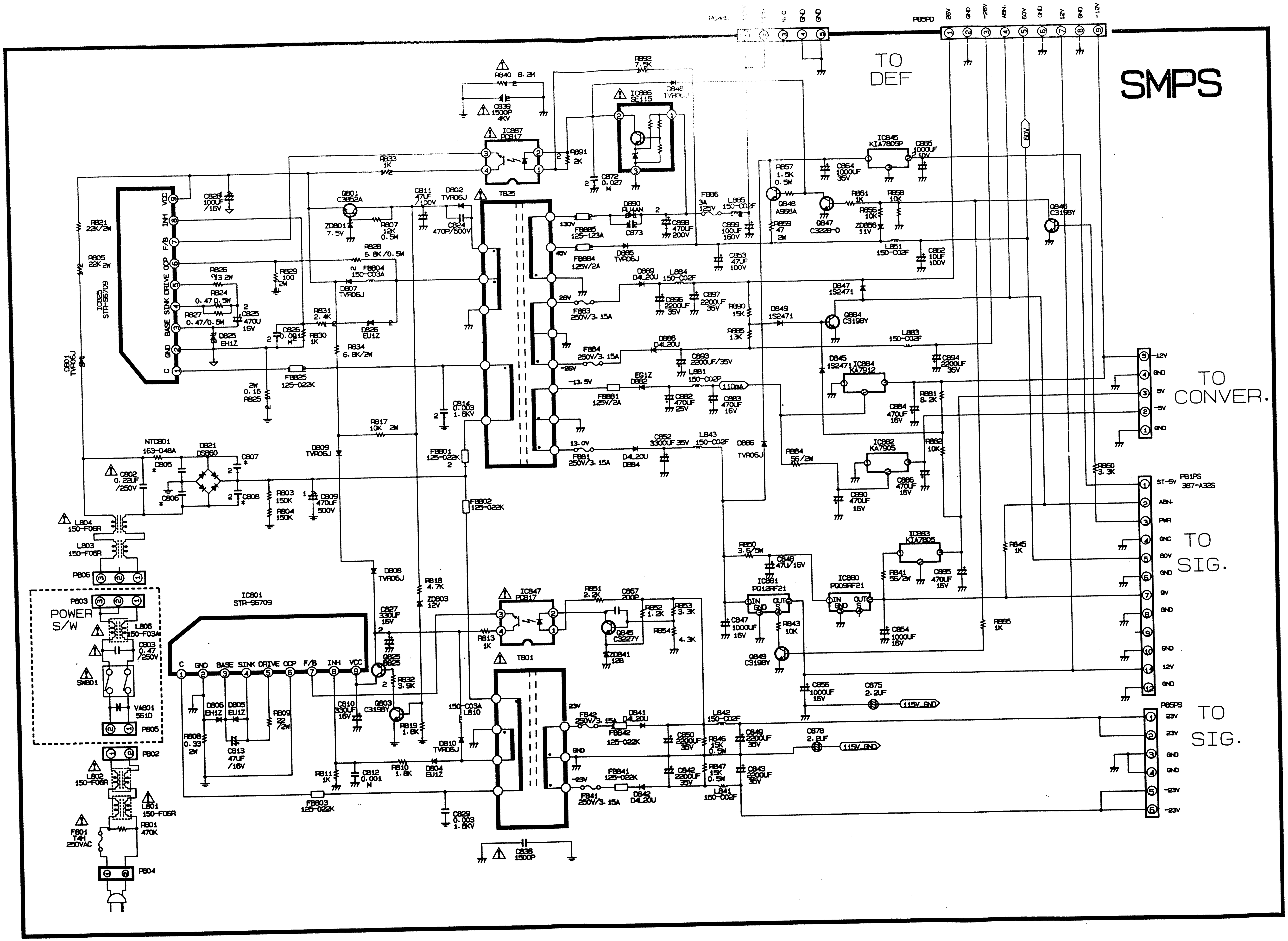
P/N:3854VA0041B(1/2)


AV-3
P201PSA
C280A 4.7U /16V
C281A 4.7U /16V
SMALL TYPE
R274A 150K
R273A 150
R272A 180
R271A 270K
R270A 270K
P202A S-JACK
P203A V-IN
P204A R-IN
P205A L-IN
PHONO-JACK

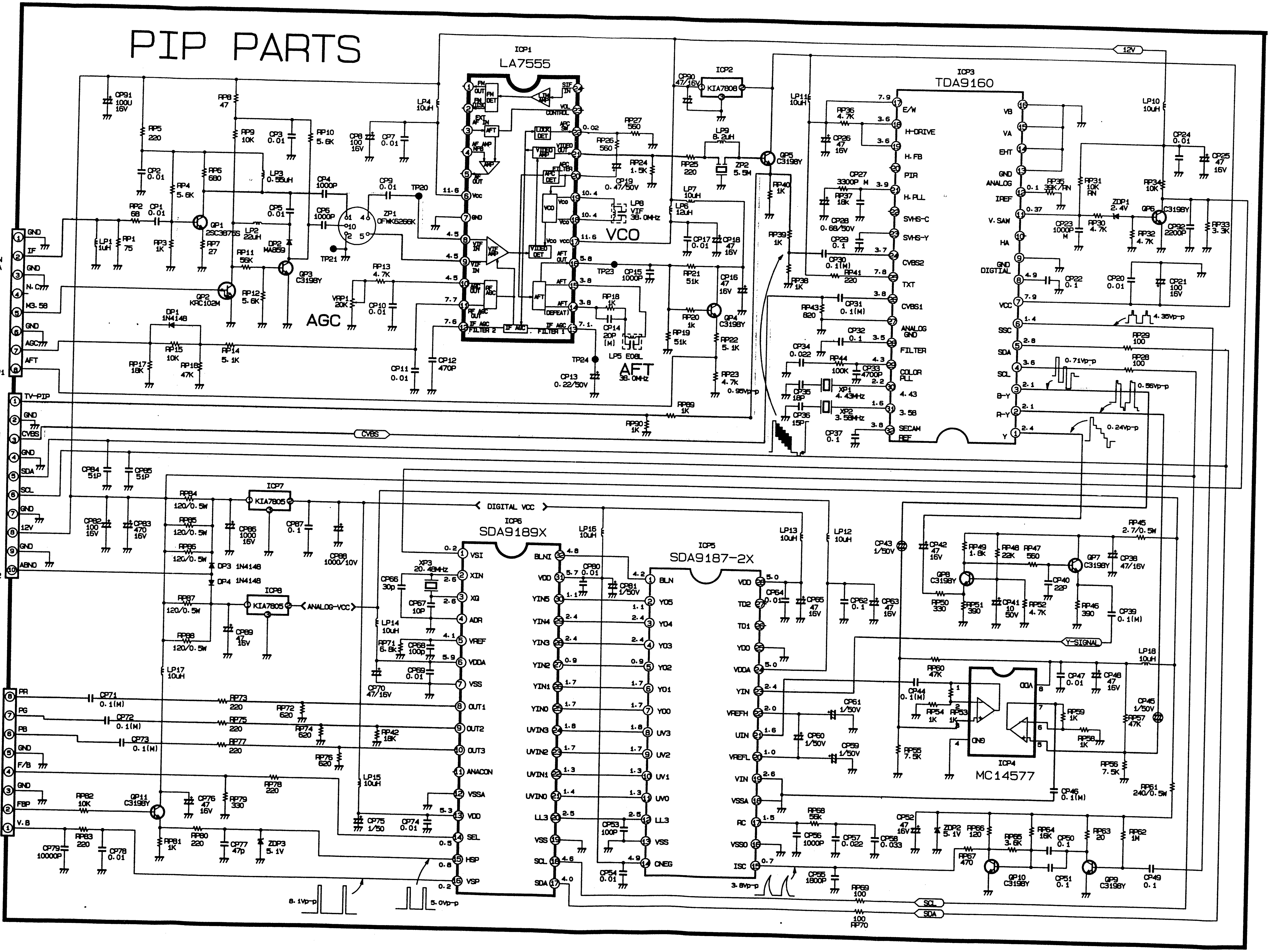

5V
GND
IR
P03PSP
L01P 10uH
C01P 0.01
C02P 47 /10V
PA01P
PREAMP

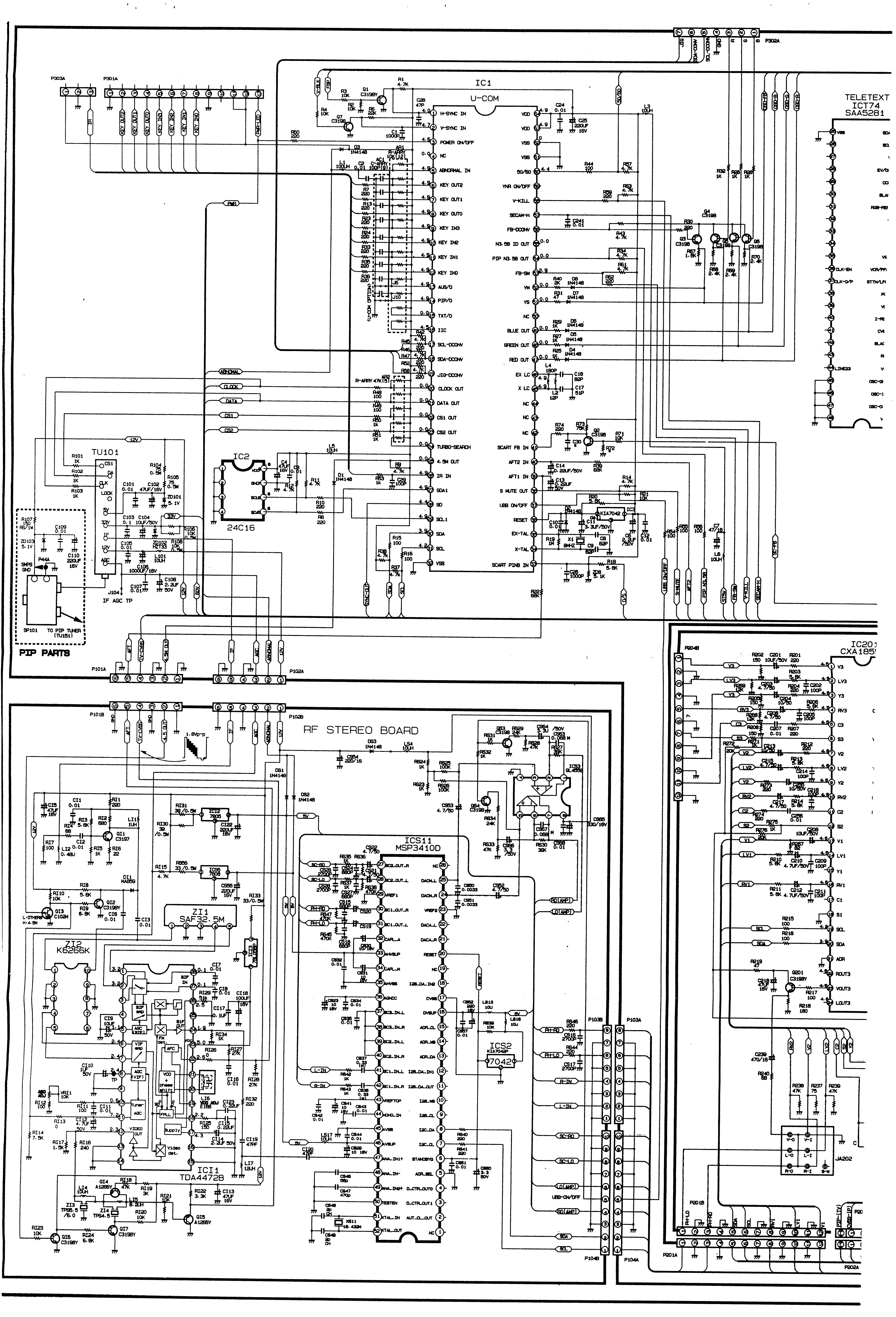

CONTROL
P01PSC
GND
KIN0
KIN1
KIN2
KO0
KO1
KO2
KO3
Vcc
POW-LED
SW10C TV/VI
SW07C MENU
SW06C AI
SW05C AS
SW04C VOL+
SW08C VOL-
SW09C ENT.
SW01C POW
SW02C CH+
SW03C CH-
L01C 10uH
C01C 47U 10V
C02C 0.01
R03C 680
R07C 10K
R08C 220
DL04C
Q03C C3198
Q04C C3198
DEF/PCB SCREEN
CRT PWB(B)
P50PSB
Y-MUTE
12V
P917B
R907B 15K/2W
R906B 12K/2W
C903B 10u /315V
L902B 150uH
R908B 8.2K/0.5W
R909B 560/0.5W
SG902B 1.5KV
R919B 330
R921B 100
Q904B KTC2068
C902B 100/16V
D901B 1S2471
R905B 100
Q902B KTC3198
C907B 220U/16V
D902B 1S2471
R910B 22
C901B 180P
R920B 200
R913B 470K /0.5W
C904B 0.0022 /2KV
SG901B 1.5KV
R912B 220K/0.5W
R911B 220K/0.5W
VR902B 1MB/0.5W
R915B 470K/0.5W
R914B 470K/0.5W
R916B 470K/0.5W
R917B 470K/0.5W
SCREEN B
S2B
GND2B
S1B
GND1B
DEF PWB SCREEN
FB901B
FB902B
GND3B
GND4B
18CCS822(B)
TO H/V. BLOCK
P919B
TO FOCUS PACK
250V
CRT PWB(G)
P50PSG
P917G
R907G 15K/2W
R906G 12K/2W
C903G 10u /315V
L902G 150uH
R908G 8.2K/0.5W
R909G 560/0.5W
SG902G 1.5KV
R919G 330
R921G 100
Q904G KTC2068
C902G 100/16V
D901G 1S2471
R905G 100
Q902G KTC3198
C907G 220U/16V
D902G 1S2471
R910G 22
C901G 180P
R920G 200
R913G 470K /0.5W
C904G 0.0022 /2KV
SG901G 1.5KV
R912G 470K/0.5W
R911G 470K/0.5W
VR902G 1MB/0.5W
R915G 470K/0.5W
R914G 220K/0.5W
R916G 220K/0.5W
R917G 470K/0.5W
SCREEN G
S1G
GND1G
S2G
GND2G
FB901G
FB902G
GND3G
GND4G
18CCS822(G)
P753G
TO H/V. BLOCK
P45PP
FROM DEF PWB
TO FOCUS PACK
CRT PWB(R)
P50PSR
R907R 15K/2W
R906R 12K/2W
C903R 10u /315V
L902R 150uH
R908R 8.2K/0.5W
R909R 560/0.5W
SG902R 1.5KV
R919R 330
R921R 100
Q904R KTC2068
C902R 100/16V
D901R 1S2471
R905R 100
Q902R KTC3198
C907R 220U/16V
D902R 1S2471
R910R 22
C901R 180P
R920R 270
R913R 470K /0.5W
C904R 0.0022 /2KV
SG901R 1.5KV
R912R 470K/0.5W
R911R 470K/0.5W
VR902R 1MB/0.5W
R915R 470K/0.5W
R914R 220K/0.5W
R916R 220K/0.5W
R917R 470K/0.5W
SCREEN R
S1R
GND1R
FB901R
FB902R
GND3R
GND4R
18CCS822(R)
P911R
TO H/V. BLOCK
TO. FOCUS PACK SCREEN

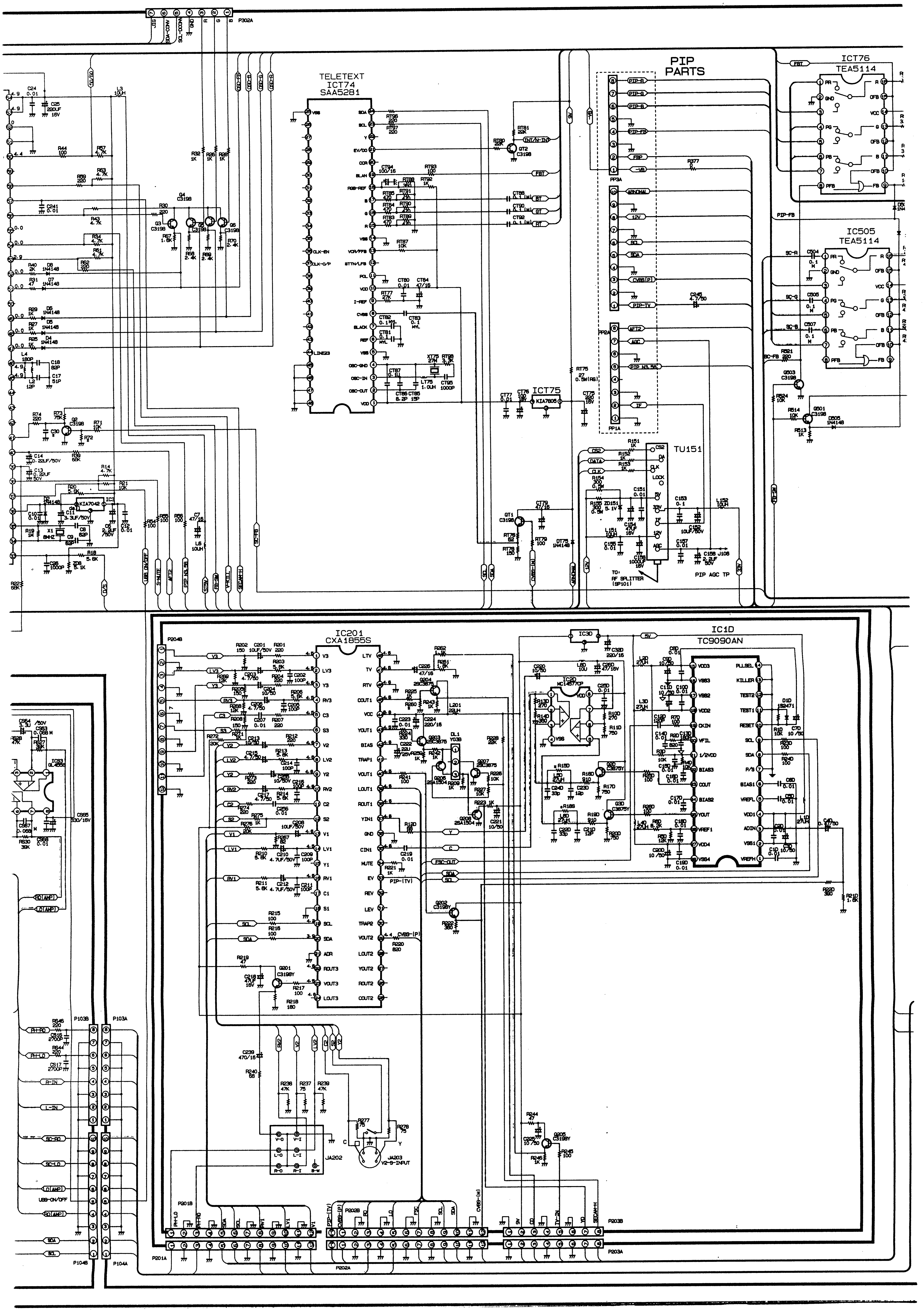
PF-43A20 SMSP+PIP+CRT
3854VA0041A 2/2


SMPS
TO DEF
TO CONVER.
TO SIG.
TO SIG.
P85P0
26V
GND
-26V
ABN.
60V
GND
12V
GND
-12V
N.C
GND
GND
60V
IC825
STR-S6709
VCC
INH
F/B
OCP
DRIVE
SINK
BASE
GND
C
IC801
STR-S6709
C GND BASE SINK DRIVE OCP F/B INH VCC
IC887
PC817
IC886
SE115
IC847
PC817
T825
T801
R840 8.2M
C839 1500P 4KV
R892 7.5K 1/2W
D840 TVR06J
R891 2K
C872 0.027 M
R833 1K 1/2W
R821 22K/2W
R805 22K 2W
C828 100UF /16V
Q801 C3852A
ZD801 7.5V
R807 12K 0.5W
C811 47UF /100V
D802 TVR06J
C824 470P/500V
R826 6.8K/0.5W
R828 ?13 2W
R829 100 2W
FB804 150-C03A
D807 TVR06J
R824 0.47 0.5W
R827 0.47/0.5W
C825 470U 16V
D825 EH1Z
R831 2.4K
D826 EU1Z
C826 0.001 M
R830 1K
R834 6.8K/2W
FB825 125-022K
R825 0.15 2W
D801 TVR06J
C814 0.003 1.6KV
R817 10K 2W
NTC801 163-048A
D821 D5S60
C802 0.22UF /250V
C805
C806
C807
C808
R803 150K
R804 150K
C809 470UF 500V
D809 TVR06J
FB801 125-022K
FB802 125-022K
L804 150-F06R
L803 150-F06R
P806
P803
POWER S/W
L806 150-F03A
C803 0.47 /250V
SW801
VA801 561D
P805
P802
L802 150-F06R
L801 150-F06R
R801 470K
F801 T4H 250VAC
P804
D808 TVR06J
R818 4.7K
ZD803 12V
C827 330UF 16V
Q825 B825
R832 3.9K
R813 1K
C810 330UF 16V
Q803 C3198Y
R819 1.8K
D806 EH1Z
D805 EU1Z
R809 22 /2W
R808 0.33 2W
C813 47UF /16V
R811 1K
C812 0.001 M
R810 1.8K
D804 EU1Z
D810 TVR06J
L810 150-C03A
FB803 125-022K
C829 0.003 1.6KV
C838 1500P
130V
FB885 125-123A
D890 RU4AM
C873
C898 470UF 200V
F886 3A 125V
L865 150-C02F
C899 100UF 160V
45V
FB884 125V/2A
D885 TVR06J
C853 47UF 100V
26V
D889 D4L20U
L884 150-C02F
C896 2200UF 35V
C897 2200UF 35V
FB883 250V/3.15A
F884 250V/3.15A
-26V
D886 D4L20U
C893 2200UF/35V
-13.5V
FB881 125V/2A
EG1Z D882
L881 150-C02P
C882 470UF 25V
C883 470UF 16V
110mA
13.0V
F881 250V/3.15A
D4L20U D884
C852 3300UF 35V
L843 150-C02F
R890 15K
R885 13K
D849 1S2471
D847 1S2471
Q884 C3198Y
L883 150-C02F
C894 2200UF 35V
D845 1S2471
IC884 KA7912
R881 8.2K
C884 470UF 16V
D885 TVR06J
R884 56/2W
IC882 KA7905
R882 10K
C886 470UF 16V
C890 470UF 16V
R857 1.5K 0.5W
C864 1000UF 35V
IC845 KIA7805P
C865 1000UF 10V
Q848 A968A
Q847 C3228-0
R859 47 2W
R861 1K
R856 10K
ZD856 11V
R858 10K
L851 150-C02F
C862 10UF 100V
Q846 C3198Y
R860 3.3K
-12V
GND
5V
-5V
GND
P81PS 387-A32S
ST-5V
ABN.
PWR
GND
60V
GND
9V
GND
GND
12V
GND
R850 3.6/5W
C848 47U/16V
IC881 PQ12RF21
IN GND OUT S
IC880 PQ09RF21
IC883 KIA7805
R841 56/2W
C885 470UF 16V
R845 1K
R851 2.2K
C857 200P
R852 1.2K
R853 3.3K
R854 4.3K
Q845 C3227Y
ZD841 12B
C847 1000UF 16V
R843 10K
Q849 C3198Y
C854 1000UF 16V
R855 1K
C856 1000UF 16V
C875 2.2UF
115V_GND
23V
F842 250V/3.15A
FB842 125-022K
D841 D4L20U
L842 150-C02F
C850 2200UF 35V
R846 15K 0.5W
C849 2200UF 35V
C878 2.2UF
GND
-23V
FB841 125-022K
F841 250V/3.15A
D842 D4L20U
C842 2200UF 35V
R847 15K 0.5W
C843 2200UF 35V
L841 150-C02F
P85PS
23V
23V
GND
GND
-23V
-23V

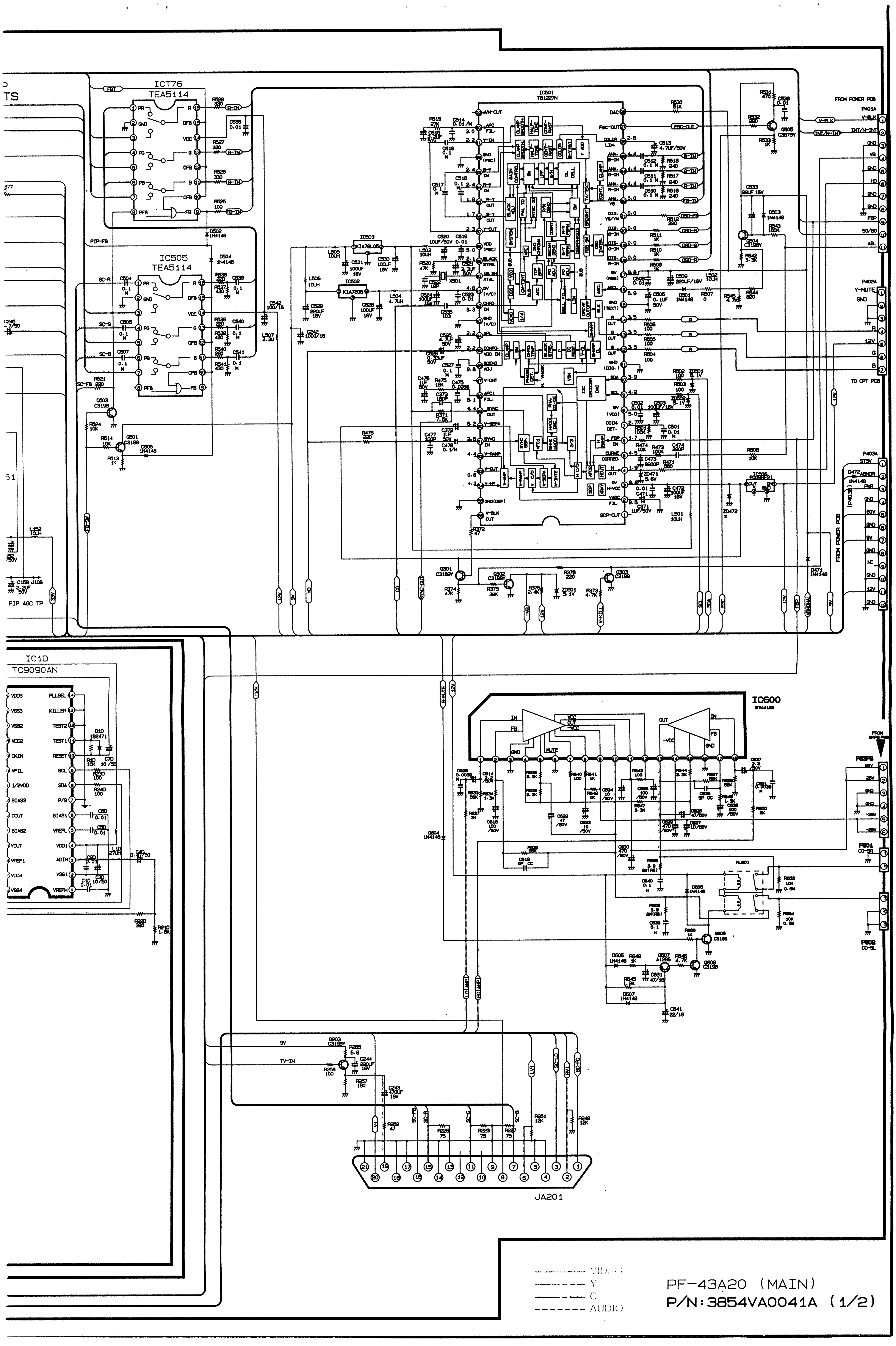
PIP PARTS


ICP1
LA7555
ICP2
KIA7808
ICP3
TDA9160
ICP4
MC14577
ICP5
SDA9187-2X
ICP6
SDA9189X
ICP7
KIA7805
ICP8
KIA7805
TO MAIN PP1A
PP1
TO MAIN PP2A
PP2
TO MAIN PP3A
PP3
GND
IF
N.C
M3.58
AGC
AFT
TV-PIP
CVBS
SDA
SCL
12V
ABNO
PR
PG
PB
F/B
FBP
V.B
AGC
VCO
AFT
DIGITAL VCC
ANALOG-VCC
Y-SIGNAL
12V
QP1 2SC3875S
QP2 KRC102M
QP3 C3198Y
QP4 C3198Y
QP5 C3198Y
QP6 C3198Y
QP7 C3198Y
QP8 C3198Y
QP9 C3198Y
QP10 C3198Y
QP11 C3198Y
ZP1 OFWK6266K
ZP2 5.5M
LP5 E08L 38.0MHz
LP8 VIF 38.0MHz
XP1 4.43MHz
XP2 3.58MHz
XP3 20.48MHz
DP1 1N4148
DP2 MA859
DP3 1N4148
DP4 1N4148
ZDP1 2.4V
ZDP2 5.1V
ZDP3 5.1V
TP20
TP21
TP23
TP24
4.35Vp-p
0.71Vp-p
0.56Vp-p
0.24Vp-p
0.95Vp-p
3.8Vp-p
8.1Vp-p
5.0Vp-p


IC1
U-COM
TELETEXT
ICT74
SAA5281
IC2
24C16
TU101
PIP PARTS
SP101
TO PIP TUNER (TU151)
IF AGC TP
RF STEREO BOARD
ICS11
MSP3410D
ZI1
SAF32.5M
ZI2
K6266K
ICI1
TDA4472B
ICS2
KIA7042P
IC201
P303A
P301A
P302A
P101A
P102A
P101B
P102B
P103B
P103A
P104B
P104A
P204B
P201B
P201A
P202A
JA202



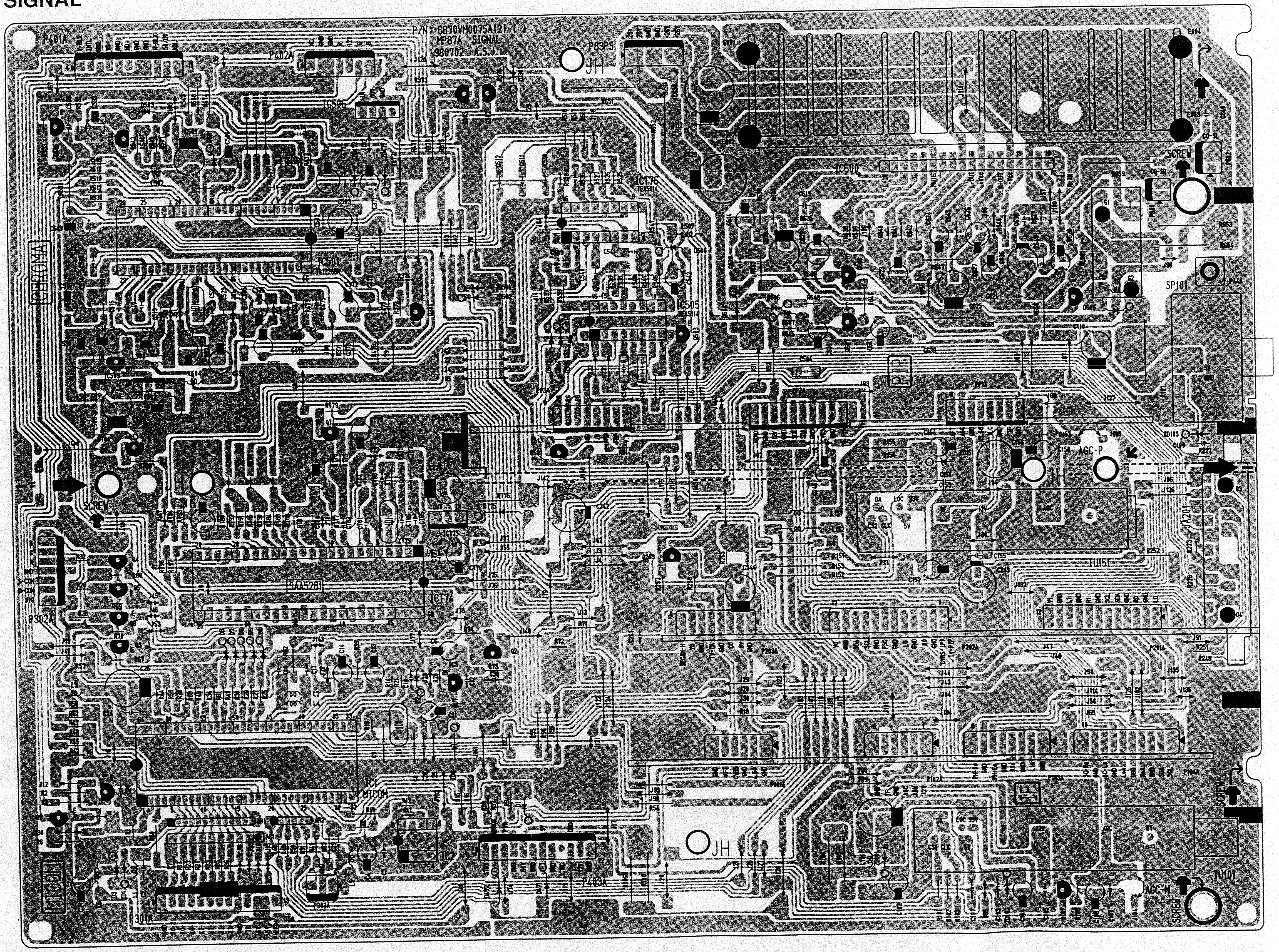
P302A
JIG
SDA-CONN
SCL-CONN
GND
R
G
B
TELETEXT
ICT74
SAA5281
PIP
PARTS
ICT76
TEA5114
IC505
TEA5114
ICT75
KIA7805
TU151
PP3A
PP2A
PP1A
PIP-R
PIP-G
PIP-B
PIP-FB
FBP
-VB
ABNOMAL
12V
SCL
SDA
CVBS(P)
PIP-TV
AFT2
AGC
PIP N3.58
IF
CS2
DATA
CLK
TO
RF SPLITTER
(SP101)
PIP AGC TP
QT1
C3198
QT2
C3198
Q2
C3198
Q3
C3198
Q4
C3198
Q5
C3198
Q6
C3198
Q503
C3198
Q501
C3198
KIA7042
IC3
X1
8MHZ
IC201
CXA1855S
IC1D
TC9090AN
IC3D
IC2D
MC14577CP
P204B
V3
LV3
Y3
RV3
C3
S3
V2
LV2
Y2
RV2
C2
S2
V1
LV1
Y1
RV1
C1
S1
SCL
SDA
LTV
TV
RTV
COUT1
VCC
YOUT1
BIAS
TRAP1
VOUT1
LOUT1
ROUT1
YIN1
GND
CIN1
MUTE
EV
REV
LEV
TRAP2
VOUT2
LOUT2
YOUT2
ROUT2
COUT2
ADR
ROUT3
VOUT3
LOUT3
Q201
C3198Y
Q202
C3198Y
Q203
2SC3875
Q204
2SC3875
Q205
C3198Y
Q206
2SA1504
Q207
2SC3875
Q208
2SA1504
DL1
Y03B
Y
C
FSC-OUT
PIP-(TV)
CVBS-(P)
PLLSEL
KILLER
TEST2
TEST1
RESET
P/S
BIAS1
VREFL
VDD1
ADIN
VSS1
VREFH
VDD3
VSS3
VSS2
VDD2
CKIN
VFIL
1/2VDD
BIAS3
COUT
BIAS2
YOUT
VREF1
VDD4
VSS4
JA202
JA203
V2-S-INPUT
V-O
V-I
L-O
L-I
R-O
R-I
S-W
P103B
P103A
P104B
P104A
RH-RO
RH-LO
R-IN
L-IN
SC-RO
SC-LO
LO(AMP)
RO(AMP)
UBB-ON/OFF
P201A
P201B
P202A
P202B
P203A
P203B
S-MUTE
AFT2
PIP N3.58
STBY
VPOLL
SECAM-H
SC-FB
PIP-FB
FBT
IC3S
GL455G


ICT76
TEA5114
IC505
TEA5114
IC501
TB1227N
IC503
KIA78L05
IC502
KIA7805
IC1D
TC9090AN
IC600
STK4132
JA201
FROM POWER PCB
P401A
P402A
TO CPT PCB
P403A
P403B
FROM POWER PCB
FROM SMPS PWB
P803
P801
CO-SR
P802
CO-SL
RL801
PIP AGC TP
VIDEO
Y
C
AUDIO

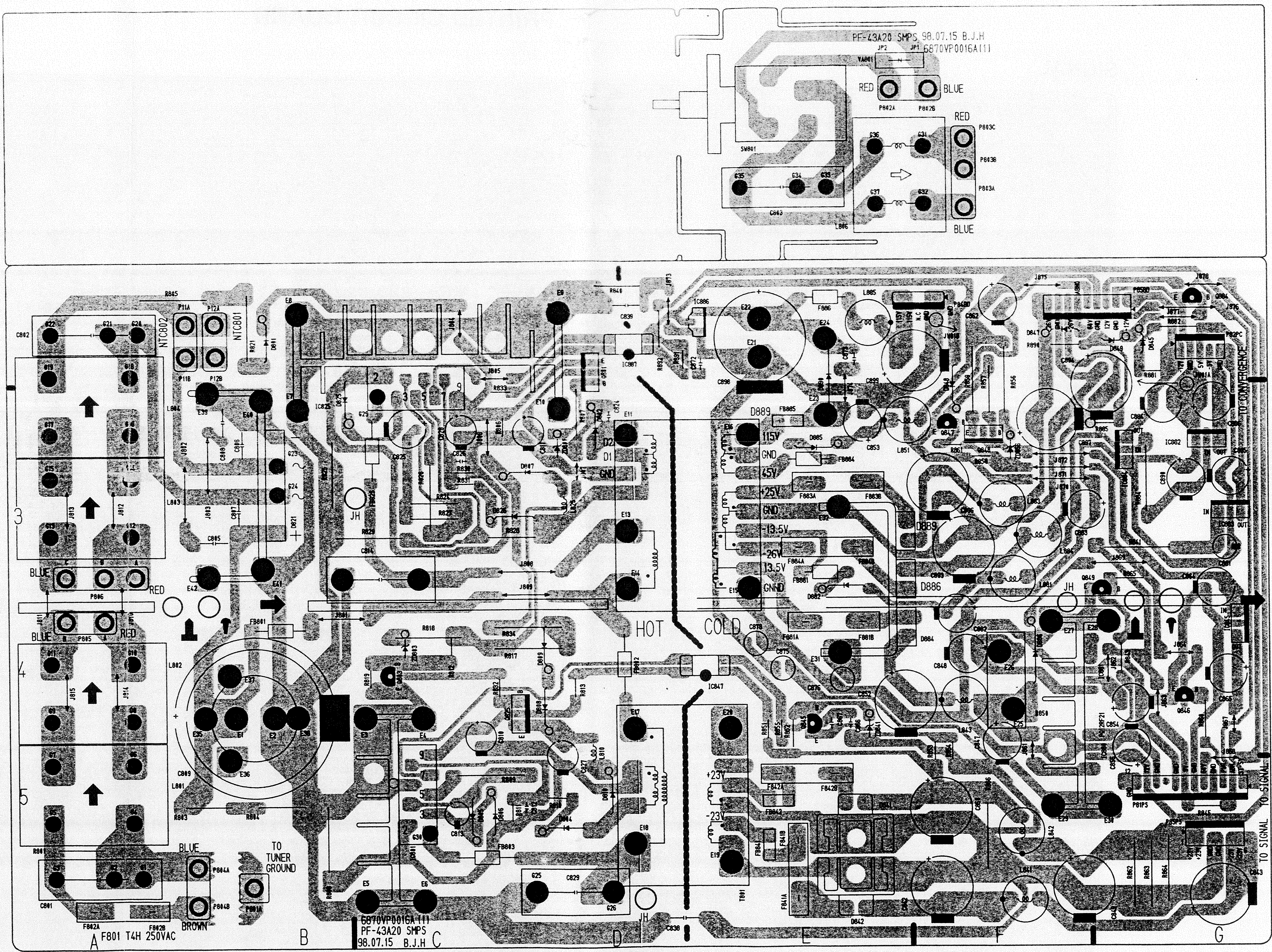
PF-43A20 (MAIN)
P/N:3854VA0041A (1/2)

PRINTED CIRCUIT BOARD

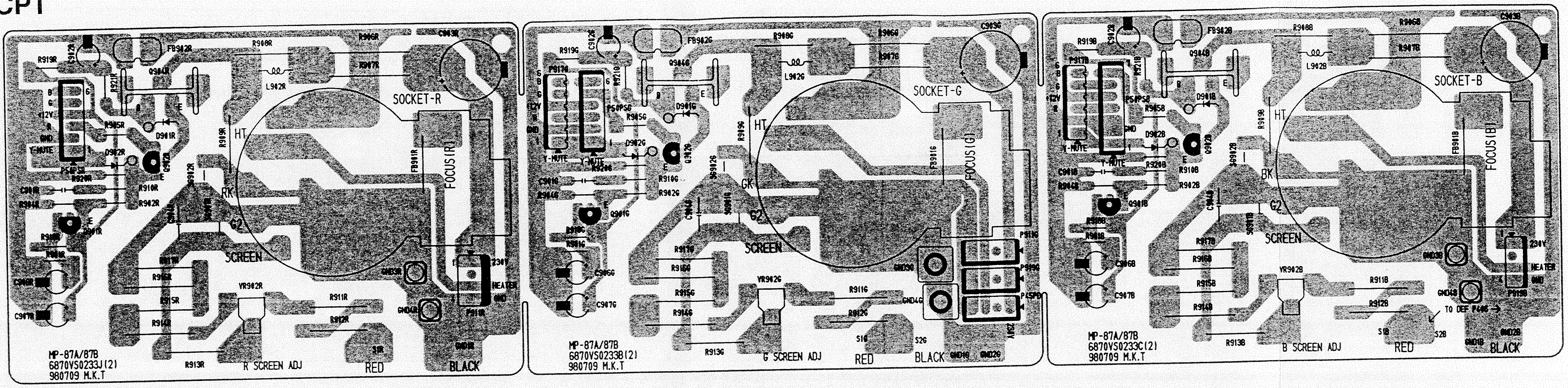
SIGNAL


P/N: 6870VM0075A(2)-( )
MP87A SIGNAL
980702 A.S.J
P401A
P402A
P83P5
JH
IC506
IC600
IC501
IC505
IC176
SCREW
SP101
AGC-P
TU151
J120
SAA5281
IC174
IC1
MICOM
P302A
P301A
P303A
P403A
P202A
P201A
P102A
P104A
AGC-M
TU101

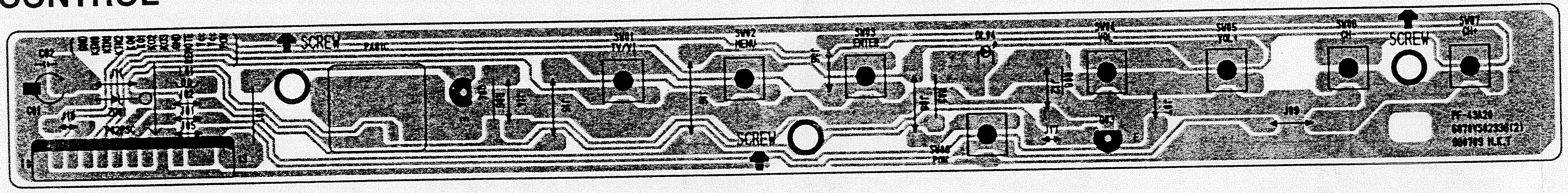
POWER


PF-43A20 SMPS 98.07.15 B.J.H
6870VP0016A(1)
RED
BLUE
SW801
P803C
P803B
P803A
HOT
COLD
115V
GND
45V
+25V
GND
13.5V
-26V
13.5V
GNND
D889
D886
JH
+23V
-23V
TO CONVERGENCE
TO SIGNAL
TO SIGNAL
TO TUNER GROUND
BROWN
NTC802
NTC801
F801 T4H 250VAC
6870VP0016A(1)
PF-43A20 SMPS
98.07.15 B.J.H
IC847
IC882
IC886
IC887
A
B
C
D
E
F
G
3
4
5

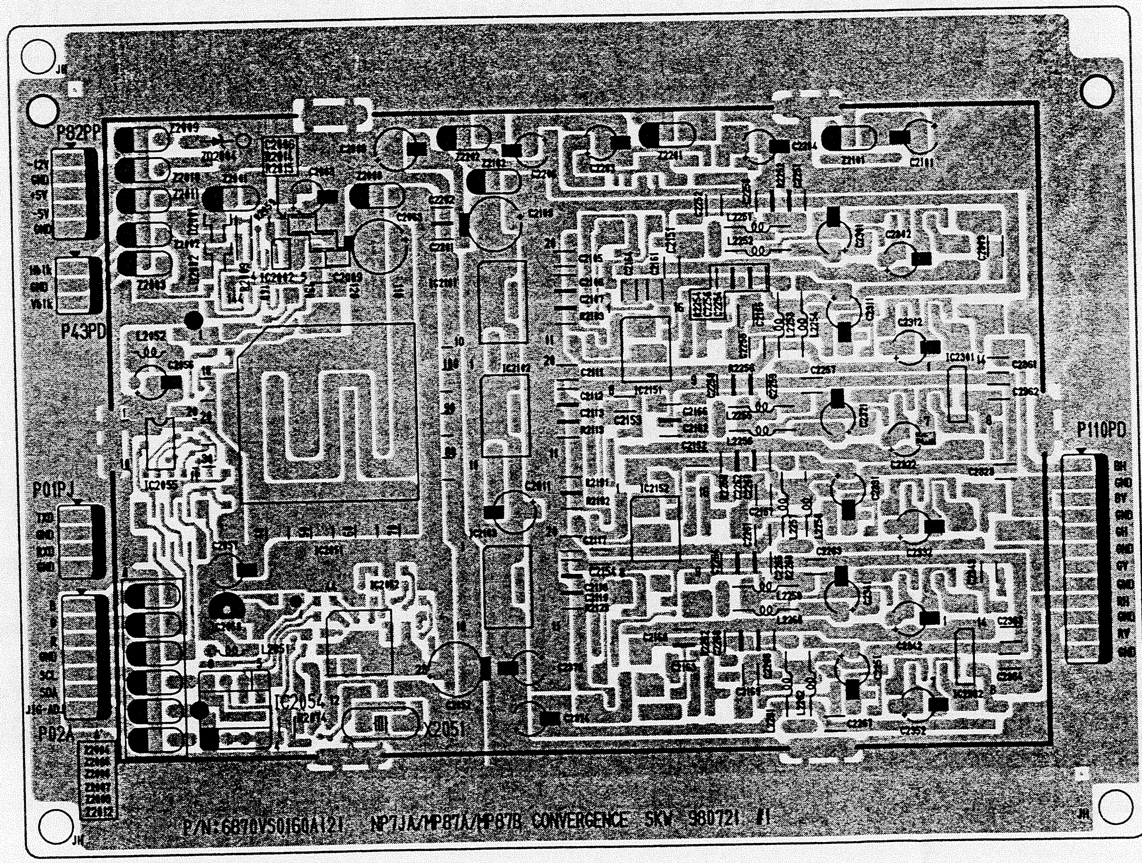
CPT


SOCKET-R
FOCUS(R)
HT
RK
G2
SCREEN
HEATER
230V
VR902R
R SCREEN ADJ
RED
BLACK
MP-87A/87B
6870VS0233J(2)
980709 M.K.T
SOCKET-G
FOCUS(G)
GK
VR902G
G SCREEN ADJ
MP-87A/87B
6870VS0233B(2)
980709 M.K.T
SOCKET-B
FOCUS(B)
BK
VR902B
B SCREEN ADJ
TO DEF P606
MP-87A/87B
6870VS0233C(2)
980709 M.K.T

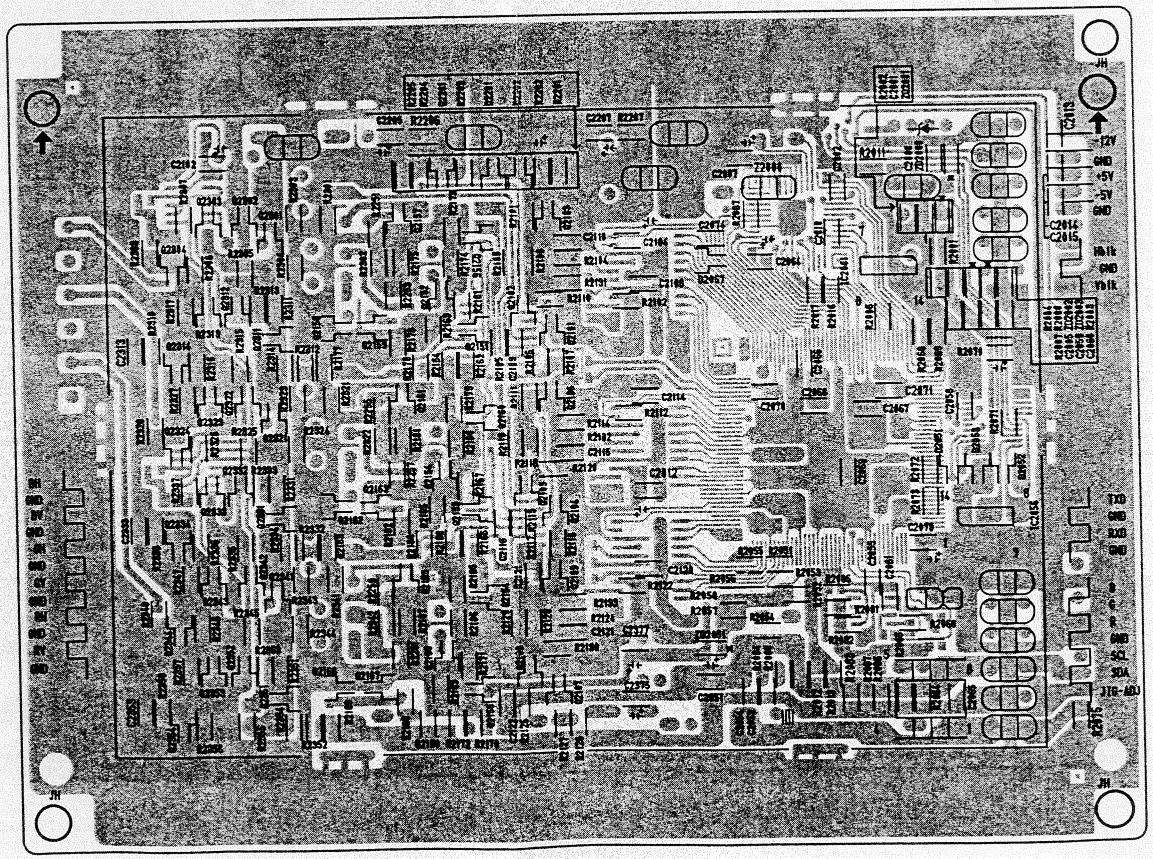
CONTROL


SCREW
SCREW
SCREW

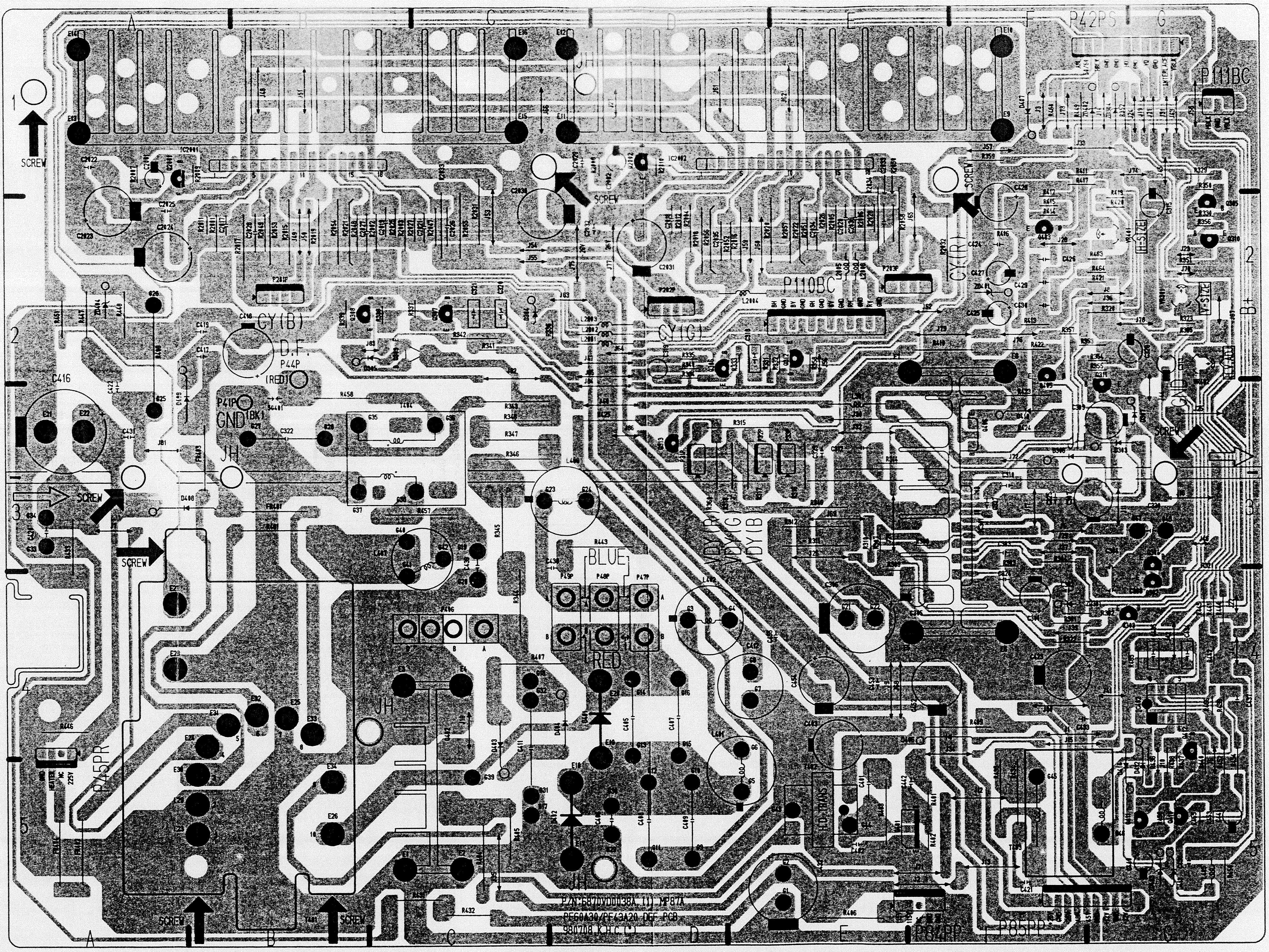
CONVERGENCE(TOP)


P82PP
P43PD
P01PJ
P02A
P110PD
IC2054
X2051
P/N:6870VS0160A(2) NP7JA/MP87A/MP87B CONVERGENCE SKW 980721 #1

CONVERGENCE(BOTTOM)



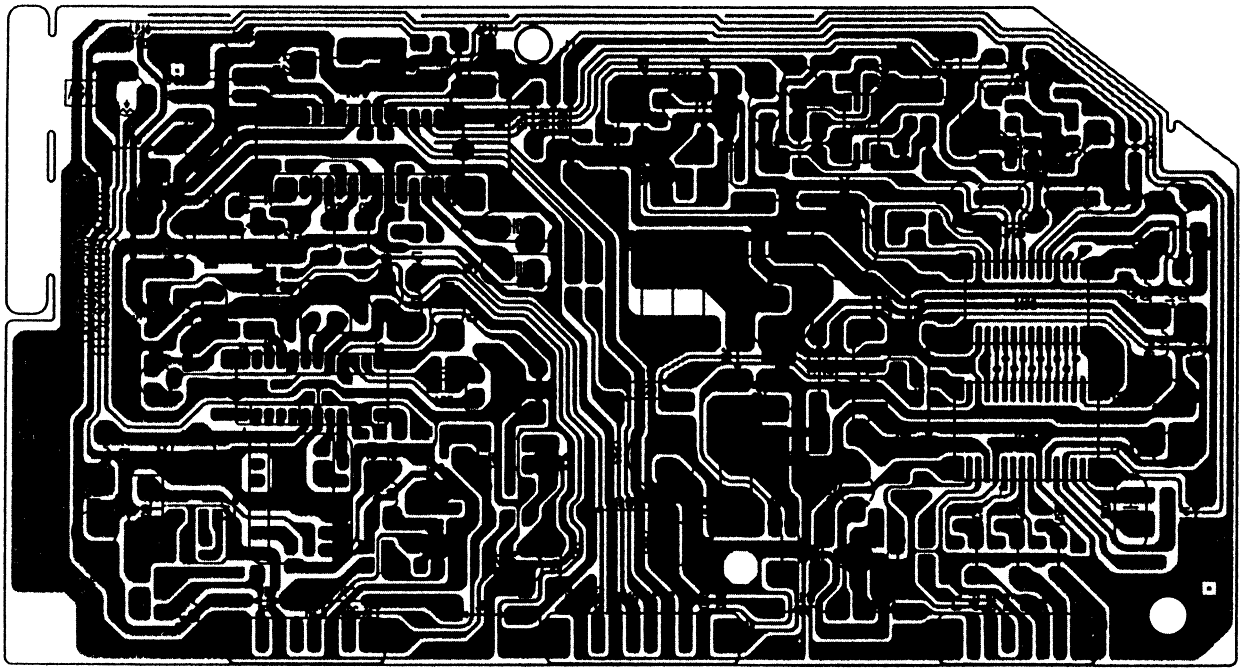
DEFLECTION


A
B
C
D
E
F
G
P42PS
P111BC
1
2
3
4
5
SCREW
CY(B)
D.F
P44P
(RED)
P41P
GND(BK)
JH
C416
CY(G)
P110BC
CY(R)
B+
BLUE
RED
DY(R)
DY(G)
DY(B)
P45PR
P104PP
P85PP
P/C:6870VD0038A (1) MP87A
PE60A30/PE43A20 DEF PCB
980708 K.H.C (1)

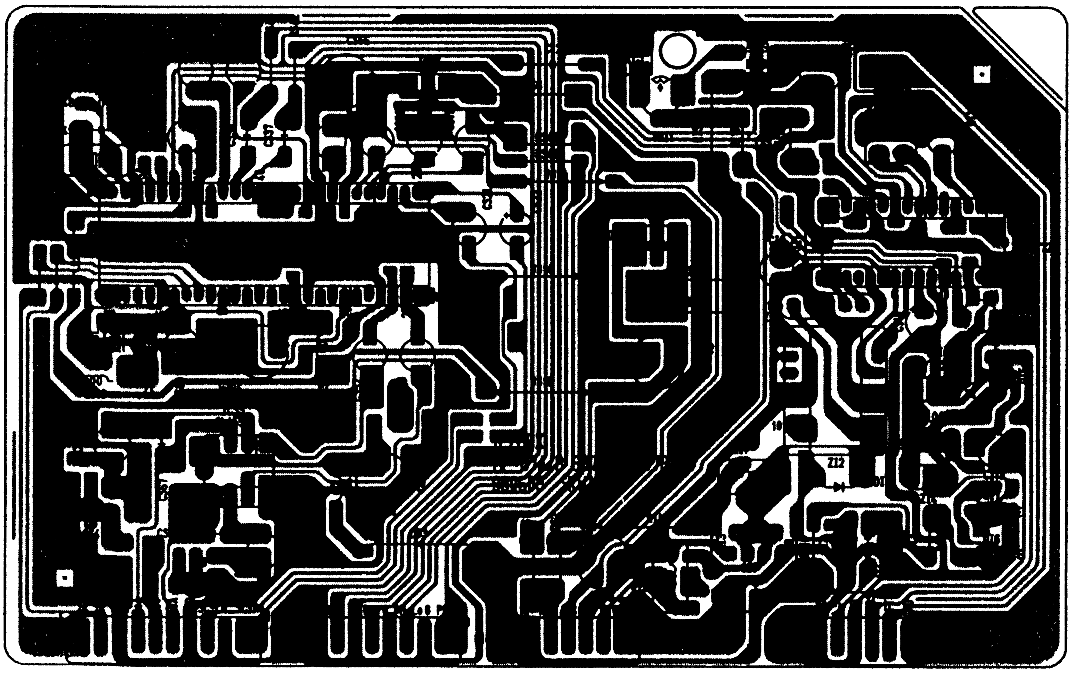
COMPONENT LOCATION GUIDE(DEF)

C301.......B2
C302.......B2
C303.......B3
C304.......A3
C305.......B2
C306 ......C2
C307.......A3
C308.......A2
C309.......A3
C310.......B3
C312 ......C3
C313.......A4
C315.......A5
C318 ......C4
C319 ......D4
C320.......E4
C321.......E4
C322.......F3
C324.......B2
C325.......B3
C327.......B3
C328.......A4
C329 ......C3
C330.......A3
C401 ......C1
C402 ......C1
C403 ......C2
C405 ......D2
C406 ......D1
C407 ......D2
C408 ......D1
C409 ......D1
C411.......E1
C412 ......C2
C416 ......G3
C417.......F4
C418.......F4
C419.......F4
C420 ......G3
C421.......B1
C422 ......G3
C423.......B2
C424.......B4
C425.......B4
C426.......B4
C427.......B4
C428.......B4
C429.......B4
C430.......B4
C431 ......G3
C432 ......C1
C433.......B2
C434.......A2
C435.......A2
C436.......A1
C437.......A2
C438.......E3
C439.......E3
C440.......A1
C441.......A1
C442.......B1
C452.......B2
C453 ......C2
C454 ......C2
C455 ......C2
C2001 ....G5
C2002 ....D5
C2017.....F4
C2018 ....D4
C2019.....E4
C2020 ....C4
C2021.....E4
C2022 ....G5
C2023 ....G4
C2024 ....G4
C2025 ....G4
C2026.....E4
C2027.....E4
C2028.....F4
C2029 ....D5
C2030 ....D4
C2031 ....D4
C2032 ....D4
C2033 ....C4
C2034 ....C4
C2035 ....D4
C2036 ....C4
D303.......A3
D304.......E4
D305.......F4
D306.......B3
D307.......A3
D401 ......D2
D402 ......D1
D403.......E1
D404 ......D2
D406.......B2
D407.......B5
D408 ......G3
D409 ......G4
D410.......B3
D412.......A2
D413.......A1
D414.......A1
FR401.....F3
FR402....G1
FR403.....F3
FR404....G1
G1 ....C1
G2 ....C1
G3 ....D2
G4 ....C2
G5 ....C1
G6 ....C2
G7 ....C2
G8 ....C2
G9 ....D1
G10 ....D1
G11 ....D1
G12 ....D1
G13 ....D2
G14 ....D2
G15 ....D2
G16 ....D2
G17 ....E1
G18 ....E2
G19 ....E3
G20 ....E3
G21 ....C2
G22 ....C2
G23 ....E3
G24 ....D3
G25 ....G3
G26 ....G4
G27.........F3
G28.........F3
G29 ....D1
G30 ....D1
G31 ....E1
G32 ....E2
G33 ....G3
G34 ....G3
G35.........F3
G36 ....E3
G37.........F3
G38 ....E3
G39 ....E1
G40 ....E3
G41 ....E3
G42 ....E3
G43 ....C1
G44 ....C1
G45 ....B1
G46 ....A1
G47 ....A3
G48 ....A3
IC301......B3
IC402......A2
IC2001 ...G5
IC2002 ...D5
L301 ....C3
L401 ....C1
L402.......D2
L405 ....A1
L406 ....E3
L407 ....E3
L2001 .....D4
L2002 .....D4
L2003 .....D4
L2004 .....C4
L2005 .....C4
L2006 .....C4
P110BC..C4
P111BC..A5
P201P.....F4
P202P D4
P203P C4
P31P D3
P32P C3
P33P C3
P406A E2
P406B E2
P406C E2
P406D E2
P42PS A5
P45PR ...G2
P47PA....D2
P47PB....D2
P48PA....D2
P48PB....D2
P49PA....D2
P49PB....D2
P84PP....C1
P85PP....B1
Q302 ......A2
Q303 ......A2
Q304 ......A3
Q305 ......A4
Q306 ......C4
Q307 ......E4
Q308 ......E4
Q309 ......E4
Q310 ......A4
Q311 ......A4
Q312 ......C4
Q313 ......D3
Q401 ......B1
Q402 ......E2
Q403 ......B4
Q405 ......B4
Q410 ......A1
Q411 ......A1
Q412 ......A2
Q2001 ....G5
Q2002 ....D5
R301.......B2
R302.......B2
R303.......B3
R304.......B3
R305.......A4
R307 ......C3
R308.......B3
R309 ......C3
R310 ......C3
R311 ......C3
R312 ......C3
R314 ......C3
R315 ......D3
R316 ......C3
R317 ......C3
R318 ......C3
R320.......A4
R321.......A3
R322.......B2
R323.......A4
R329.......A5
R330.......A4
R331 ......C4
R332 ......C4
R333 ......C4
R334 ......D4
R335 ......D4
R336 ......D4
R337.......E4
R338.......E4
R339.......F4
R340 ......D4
R341.......E4
R342.......E4
R343.......E3
R344.......E2
R345.......E3
R346.......E3
R347.......E3
R348.......E3
R349 ......C3
R350.......A5
R351.......A4
R352.......A5
R353.......B4
R354.......A4
R355.......A4
R356.......A4
R357.......B4
R358 ......C4
R359.......B5
R360 ......D3
R401.......B1
R402.......B1
R403 ......C1
R404.......E1
R405.......E1
R406 ......C1
R407.......E2
R408 ......G3
R409.......B2
R410.......B4
R411.......B5
R412.......B5
R413.......B4
R414.......B4
R415.......B4
R416.......B4
R417.......B5
R419.......A4
R420.......A4
R421.......A4
R422.......B4
R423.......B3
R424.......B3
R425 ......D3
R431.......E1
R432.......E1
R433 ......G3
R434.......B1
R435.......B1
R436.......A1
R437.......A1
R438.......A1
R439.......A2
R440.......A1
R441.......A2
R442.......A2
R443 ......D3
R444.......A2
R445.......A2
R446 ......G2
R447 ......G4
R448 ......G4
R449.......B5
R450.......A1
R451 ......G4
R452.......A1
R453.......A1
R454.......A1
R455.......A1
R456.......A1
R457.......E3
R458.......F3
R460.......B5
R461 ....F3
R463.......A4
R464.......A4
R465.......A2
R466.......A2
R2001.....F4
R2002.....E4
R2003.....E4
R2004 ....D4
R2005 ....C4
R2006 ....C4
R2007 ....G5
R2008 ....D5
R2009.....F5
R2010 ....D5
R2011.....F4
R2012 ....D4
R2015.....F5
R2016 ....C4
R2017.....F4
R2018 ....D4
R2019.....F5
R2020 ....C5
R2021.....F5
R2022 ....C5
R2025.....E4
R2026 ....C4
R2027.....E4
R2028 ....C4
R2031.....E5
R2032.....B4
R2033.....E5
R2034 ....C5
R2047.....E4
R2048.....F4
R2049.....F4
R2050 ....C4
R2051 ....C4
R2052 ....C4
R2053.....F4
R2054.....F4
R2055.....E4
R2056 ....D4
R2057 ....C4
R2058 ....C4
SG401 ....F3
T401 ....F1
T402.......C1
T403.......A1
T404 ....F3
VR301 ....A4
VR401 ....A4
VR402 ....A4
ZD301 ....B2
ZD304 ....A5
ZD401 ....B4
ZD402 ....A5
ZD403 ....A1
ZD404 ....G4

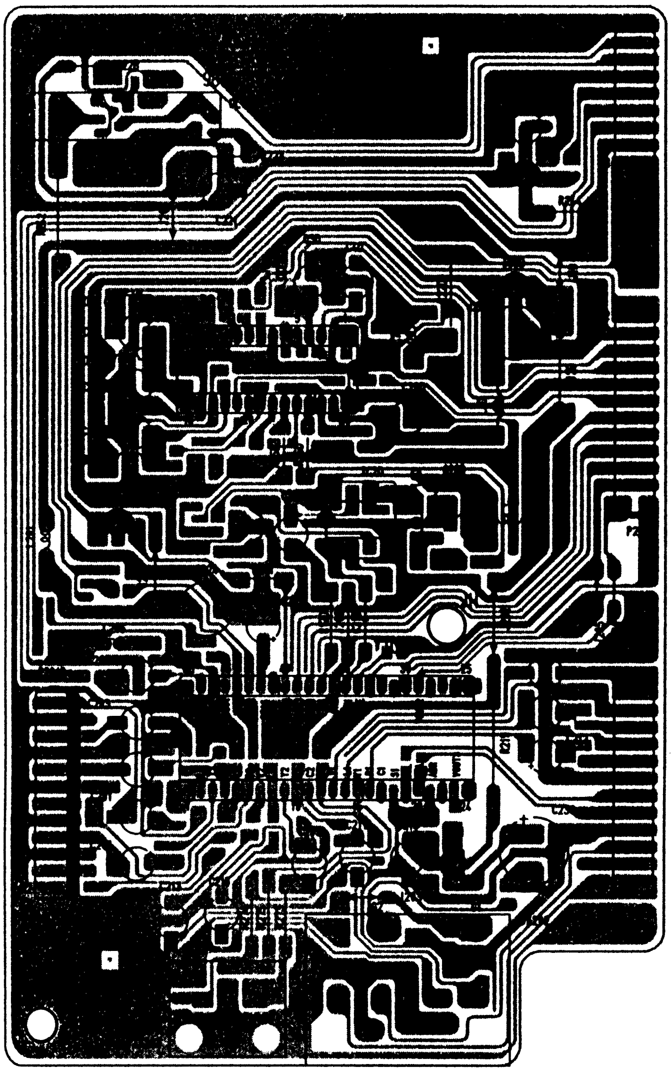
PIP



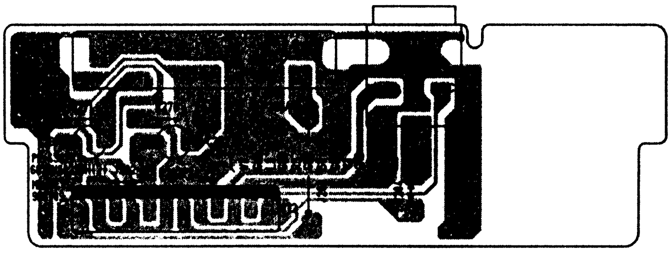
IF/MPX



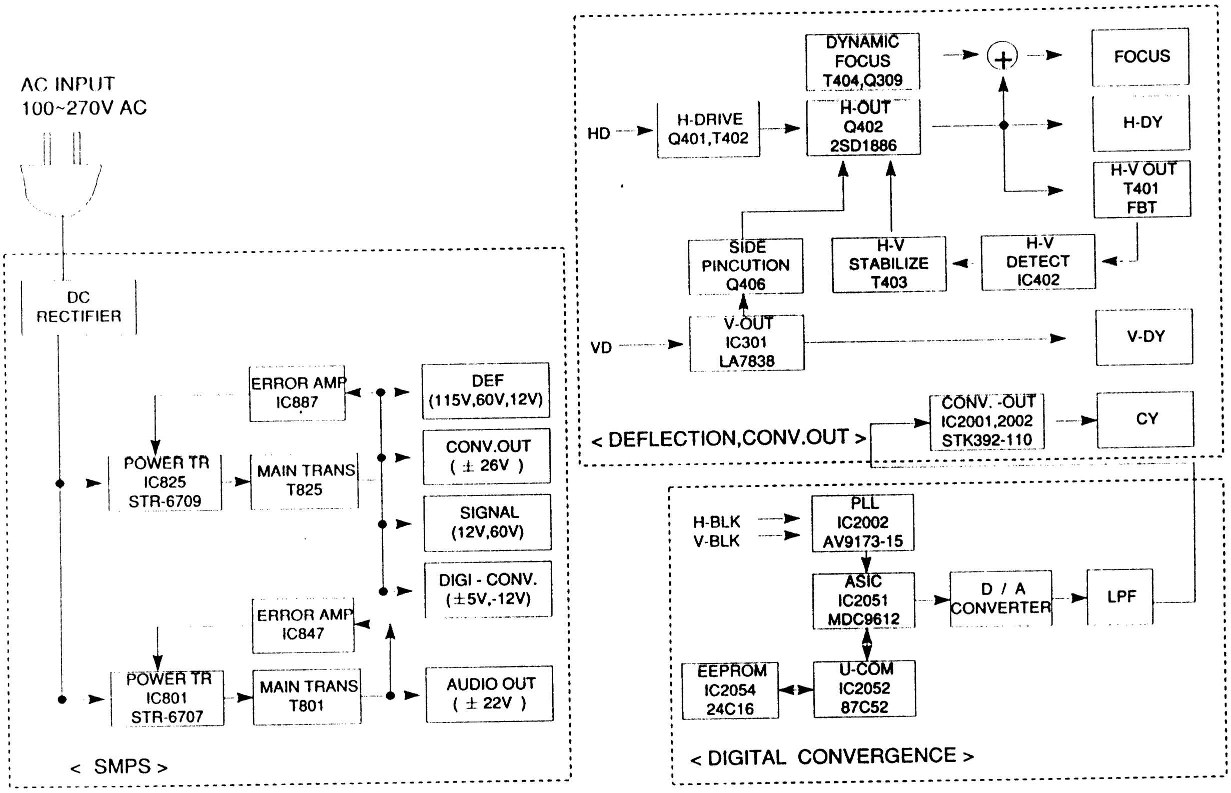
AV/DCF



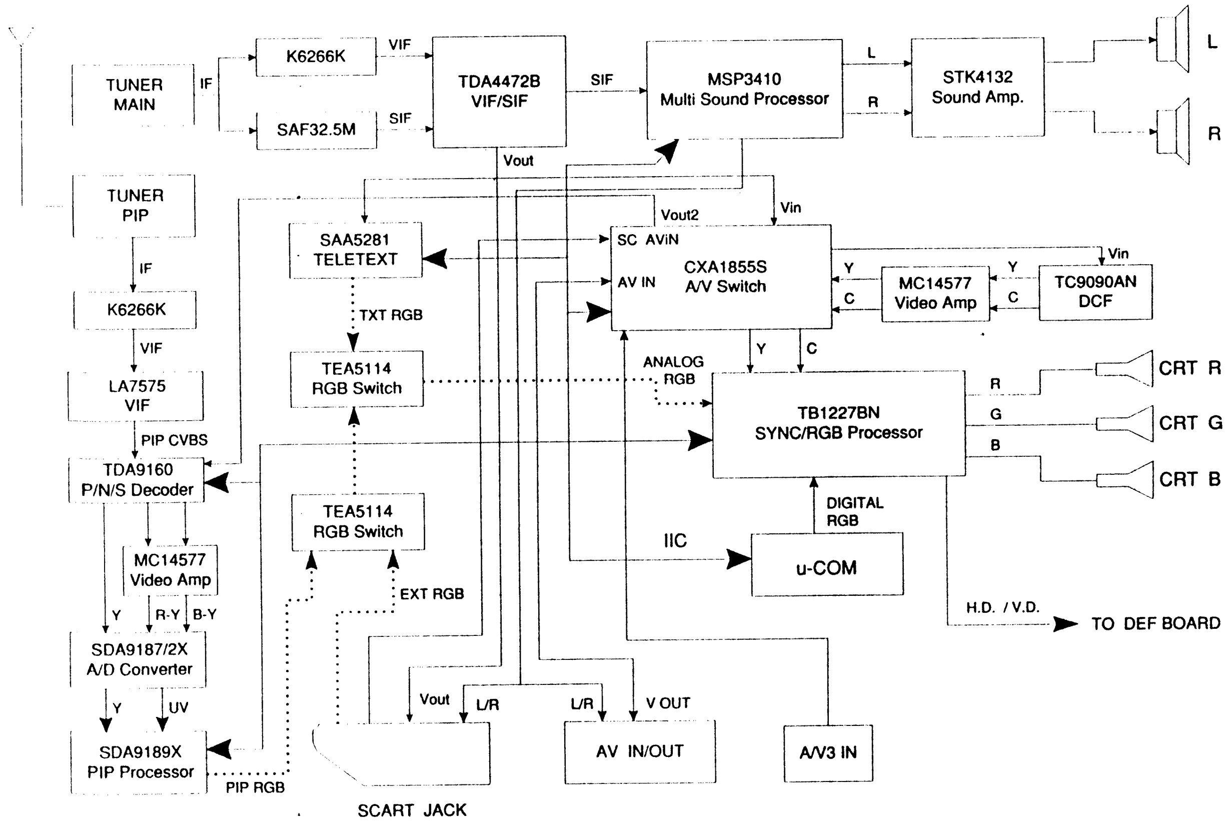
A/V 2



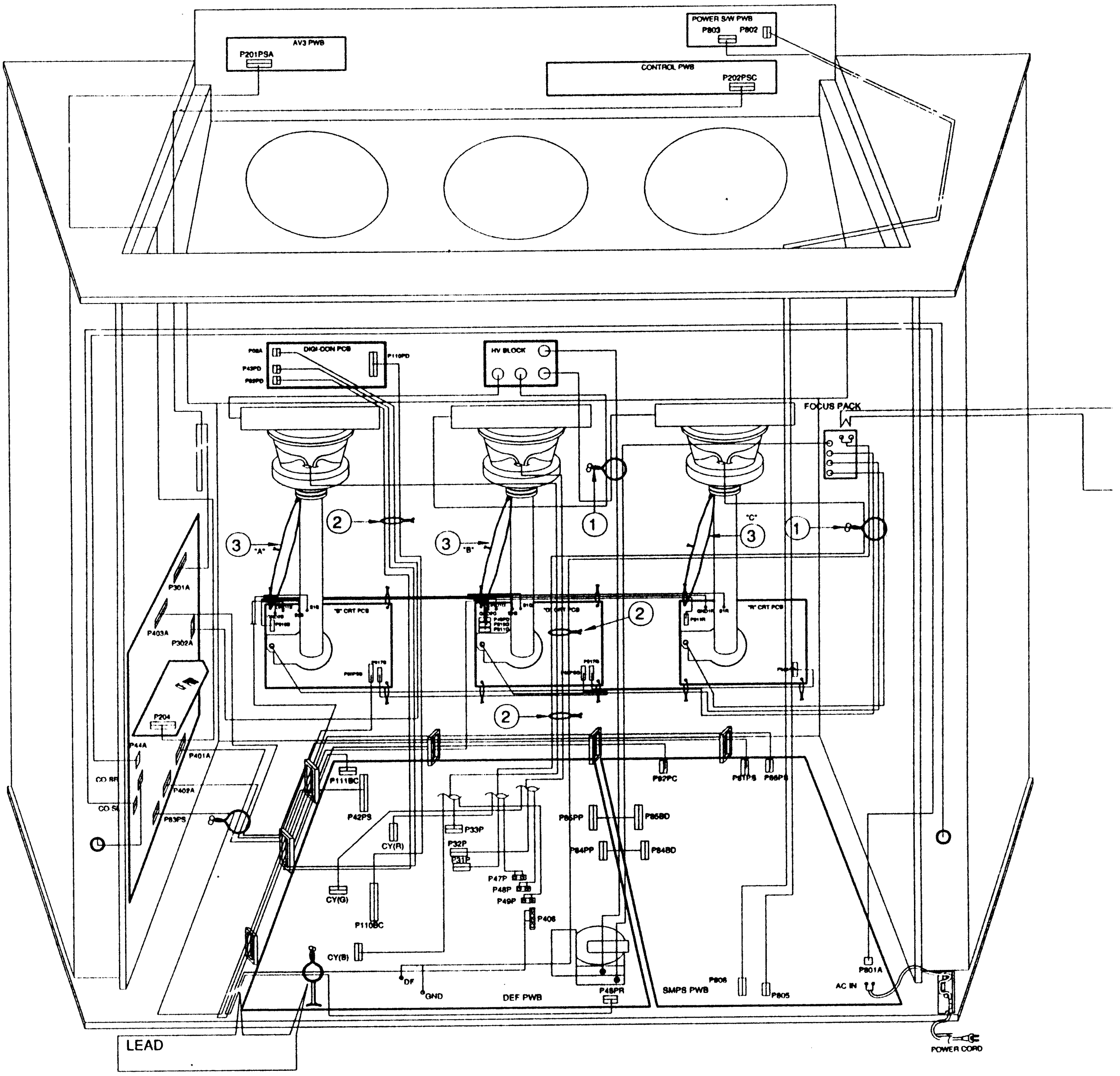
BLOCK DIAGRAM


AC INPUT
100~270V AC
DC RECTIFIER
ERROR AMP IC887
POWER TR IC825 STR-6709
MAIN TRANS T825
DEF (115V,60V,12V)
CONV.OUT (± 26V)
SIGNAL (12V,60V)
DIGI - CONV. (±5V,-12V)
ERROR AMP IC847
POWER TR IC801 STR-6707
MAIN TRANS T801
AUDIO OUT (± 22V)
< SMPS >
HD
H-DRIVE Q401,T402
DYNAMIC FOCUS T404,Q309
H-OUT Q402 2SD1886
FOCUS
H-DY
H-V OUT T401 FBT
SIDE PINCUTION Q406
H-V STABILIZE T403
H-V DETECT IC402
VD
V-OUT IC301 LA7838
V-DY
< DEFLECTION,CONV.OUT >
CONV. -OUT IC2001,2002 STK392-110
CY
H-BLK
V-BLK
PLL IC2002 AV9173-15
ASIC IC2051 MDC9612
D / A CONVERTER
LPF
EEPROM IC2054 24C16
U-COM IC2052 87C52
< DIGITAL CONVERGENCE >

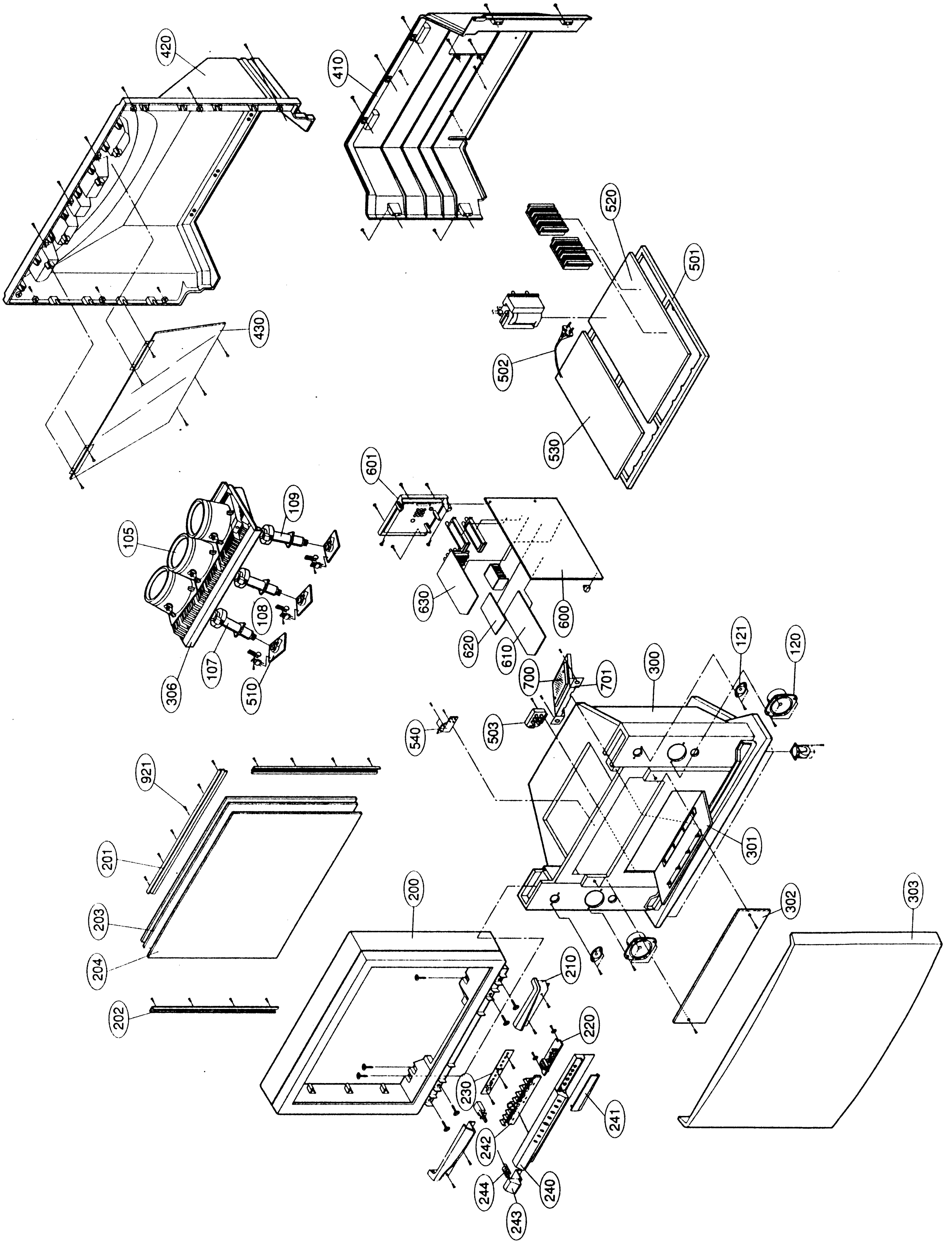
BLOCK DIAGRAM(SIGNAL)


TUNER MAIN
IF
K6266K
VIF
SAF32.5M
SIF
TDA4472B VIF/SIF
SIF
MSP3410 Multi Sound Processor
L
R
STK4132 Sound Amp.
L
R
Vout
TUNER PIP
IF
K6266K
VIF
LA7575 VIF
PIP CVBS
TDA9160 P/N/S Decoder
MC14577 Video Amp
Y
R-Y
B-Y
SDA9187/2X A/D Converter
Y
UV
SDA9189X PIP Processor
PIP RGB
SAA5281 TELETEXT
TXT RGB
TEA5114 RGB Switch
TEA5114 RGB Switch
EXT RGB
Vout2
Vin
SC AViN
AV IN
CXA1855S A/V Switch
Y
C
MC14577 Video Amp
Y
C
TC9090AN DCF
Vin
ANALOG RGB
Y
C
TB1227BN SYNC/RGB Processor
R
G
B
CRT R
CRT G
CRT B
DIGITAL RGB
IIC
u-COM
H.D. / V.D.
TO DEF BOARD
Vout
L/R
L/R
V OUT
SCART JACK
AV IN/OUT
A/V3 IN

WIRING DIAGRAM


AV3 PWB
P201PSA
POWER S/W PWB
P803
P802
CONTROL PWB
P202PSC
DIGI-CON PCB
P43PD
P110PD
HV BLOCK
FOCUS PACK
②
③
"A"
③
"B"
①
"C"
③
①
"B" CRT PCB
"G" CRT PCB
②
"R" CRT PCB
②
P301A
P403A
P302A
P204
P44A
P401A
P402A
P83PS
P111BC
P42PS
P33P
P32P
P31P
CY(R)
CY(G)
P47P
P48P
P49P
P406
P110BC
CY(B)
DF
GND
DEF PWB
P48PR
P82PC
P87PS
P86PS
P85PP
P85BD
P84PP
P84BD
SMPS PWB
P806
P805
P801A
AC IN
POWER CORD
LEAD

EXPLODED VIEW


420
410
520
501
430
502
530
601
109
105
630
600
108
620
610
107
121
120
700
701
300
306
510
540
503
921
201
301
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302
303
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210
202
220
230
241
242
244
240
243

EXPLODED VIEW PARTS LIST

No.	Part No.	Description
104	304-357E	CAP.ANODE
105	3680V00003A	LENS,DELTA 78 (A-17552-04)
107	4810V00023A	BRACKET ASSY,LIQUID COUPLER CRT(R)
108	4810V00023B	BRACKET ASSY,LIQUID COUPLER CRT(G)
109	4810V00023C	BRACKET ASSY,LIQUID COUPLER CRT(B)
120	120-C78H	SPEAKER,WOOFER NO FOSTER 8OHM 25W/35W 88 DB 1
121	6400VG0001B	SPEAKER,TWEETER NO FOSTER 8OHM 20W/30W XX D77
153	6150V-1003A	DY,OE-95-4480
200	3091V00026E	CABINET ASSY
201	4980V00021D	SUPPORTER,SCREEN(T)
202	4980V00022D	SUPPORTER,SCREEN(S)
203	3350V00001B	SCREEN,SGS7243N
210	3720V00007B	PANEL,RIGHT
220	6871VSM258A	PCB ASSY,A/V3
230	6871VSM257A	PCB ASSY,CONTROL
240	3720V00011E	PANEL ASSY,CONTROL
241	3580V00007B	DOOR,CONTROL
242	5020V00074B	BUTTON,CONTROL 8KEY ABS
243	5020V00247A	BUTTON,POWER PF-43A20 ABS .
244	320-070R	SPRING,COIL
300	3091V00025C	CABINET ASSY,WOOD
301	4980V00039A	SUPPORTER,CONV.PCB
302	3550V00011D	COVER ASSY,BOTTOM
303	3530V00027B	GRILLE ASSY,SPEAKER
304	3300V00009A	PLATE,CRT COVER
306	4980V00023A	SUPPORTER,LENS/CRT
410	3809V00020A	BACK COVER ASSY,LOWER
	3809V00020B	BACK COVER ASSY,LOWER *LGESY
420	3809V00042B	BACK COVER ASSY,UPPER
430	5018V00001B	MIRROR,SECOND SURFACE
501	4810V00001A	BRACKET,MAIN PCB
[redacted]	[redacted]	[redacted]
510	6871VSM259A	PCB ASSY,CRT MP87B
520	6871VDM059A	PCB ASSY,DEF MP87B
530	6871VPM027C	PCB ASSY,SMPS MP87B FOR CIS
	6871VPM027A	PCB ASSY,SMPS MP87B ETC
540	6871VPM027B	PCB ASSY,POWER S.W MP87B
600	6871VMM217A	PCB ASSY,SIG-M MP87B 43" STANDARD
	6871VMM217B	PCB ASSY,SIG-M MP87B 43" *LGESY
601	4810V00102A	BRACKET ASSY,A/V
610	6871VSM182A	PCB ASSY,IF
620	6871VSM183A	PCB ASSY,AV+DCF
630	6871VSM223A	PCB ASSY,PIP
700	66871VSM129C	PCB ASSY,DIGICON
701	343-B33C	SUPPORTER,DIGICON BOARD
800	341-810A	HOLDER ASSY,HV BLOCK
801	180-804A	RESISTOR,HV BLOCK MSC42-24B
943	1TTG0403116	TRUSS HEAD TAPPING SCREW + 1 D4 L16

The components identified by shading and
mark ⚠ are critical for safety.
Replace only with part number specified.

REPLACEMENT PARTS LIST

LOCA. NO	PART NO	DESCRIPTION
		IC
ICI1	0ITF447200B	IC,TDA4472M 28.SDIP BK VIF&QPS PR
ICI2	0IKE780500K	IC,KIA7805PI 3P(TO-220IS) 5V,1A
ICI3	0IKE780500P	IC,KIA78L05BP(TA)3P 5V,150MA
ICP1	0ISA755500A	IC,LA7555 PLL
ICP2	0IKE780800B	IC,KIA78L08BP(TA) TO-92 8V,150MA
ICP3	0IPH916030A	IC,TDA9160A/N3 32SD P/N/S DECODER
ICP4	0IMO145778A	IC,MC14577CF 8SMD VIDEO AMP
ICP5	0ISM918720A	IC,SDA9187/2X 28SOP PIP A/D
ICP6	0ISM918900A	IC,SDA9189X 32SOP PIP(QUARTER)
ICP7	0IKE780500K	IC,KIA7805PI 3P(TO-220IS) 5V,1A
ICP8	0IKE780500K	IC,KIA7805PI 3P(TO-220IS) 5V,1A
ICS11	0IIT341000H	IC,MSP3410D 52P,SDIP BK B4-VERSIO
ICS2	0ISS754200A	IC,KA7542Z RESET TO92 TP 4.2V
ICS3	0IKE455800E	IC,KIA4558 8DIP DUAL OP AMP
ICS6	0IKE780800A	IC,KIA7808PI 3P(TO-220IS) 1A,8V
ICT74	0IPH528100A	IC,SAA5281P/E TELETEXT DECODER
ICT75	0IKE780500K	IC,KIA7805PI 3P(TO-220IS) 5V,1A
ICT76	0ISG511400A	IC,TEA5114
IC1	0IZZVD0004D	IC,MP87A/B MICOM STANDARD 64PIN B
IC1	0IZZVD0004E	IC,MP87A/B MICOM FOR CHINA *LGESY
IC1D	0ITO909028A	IC,TC9090AN 28SD MULTI DCF
IC2	0ISG241600A	IC,ST24C16 8D EEPROM(16K)
IC2D	0IMO145770E	IC,MC14577CP 8D DUAL VIDEO AMP
IC2001	0ISA392110A	IC,STK392-110,CONV-OUT,SIP 18P
IC2001	0IPH741400E	IC,74HC14D 14SOP TP SHITTER TRIGG
IC2002	0IAE917315A	IC,AV9173-15CS08 8SOP TP PLL IC
IC2002	0ISA392110A	IC,STK392-110,CONV-OUT,SIP 18P
IC201	0ISO185500A	IC,CXA1855S 48SD A/V S/W
IC2051	0IGS961200A	IC,MDC9612 144QFP BK DIGITAL CONV
IC2052	0IZZVD0005F	IC,PF-43A20 D-CON MICOM ASSY 44PI
IC2053	0IKE744200A	IC,KIA7442P TO-92 NEGA.RESET(4.2V
IC2054	0IZZVD0005J	IC,PF-43A20 D-CON EEPROM ASSY 8PI
IC2055	0IMI350410M	IC,M35041-078FP 20,SOP BK OSD IC
IC2056	0IPH741400E	IC,74HC14D 14SOP TP SHITTER TRIGG
IC2101	0IAD312000A	IC,DAC312HS 20SOP D/A(12BIT)
IC2102	0IAD312000A	IC,DAC312HS 20SOP D/A(12BIT)
IC2103	0IAD312000A	IC,DAC312HS 20SOP D/A(12BIT)
IC2151	0IMO744053B	IC,MC74HC4053DW 16SOP 3*2CH.MUX
IC2152	0IMO744053B	IC,MC74HC4053DW 16SOP 3*2CH.MUX
IC2301	0IMO744066C	IC,MC74HC4066D 14SOP QUAD BI-S/W
IC2302	0IMO744066C	IC,MC74HC4066D 14SOP QUAD BI-S/W
IC3	0ISS754200A	IC,KA7542Z RESET TO92 TP 4.2V
IC3	0IKE704200B	IC,KIA7042P(AT) TO-92 4.2V *LGESY
IC301	0ISA783800A	IC,LA7838 13S V/OUT+R/G 2.2A
IC3D	0IKE780500P	IC,KIA78L05BP(TA)3P 5V,150MA
IC402	0IKE455800E	IC,KIA4558 8DIP DUAL OP AMP
IC501	0ITO122700A	IC,TB1227BN 56P,SDIP BK MULTI VCD
IC502	0IKE780500K	IC,KIA7805PI 3P(TO-220IS) 5V,1A
IC503	0IKE780500P	IC,KIA78L05BP(TA)3P 5V,150MA
IC505	0ISG511400A	IC,TEA5114
IC506	0ISH092100A	IC,PQ09RF21 4P 9V S/W REGULATOR

LOCA. NO	PART NO	DESCRIPTION
IC600	0ISA413200B	IC,STK4132-2 SIP18 BK AUDIO AMP(2
IC801	0ISK670795A	IC,STR-S6707N(LF953) 9P,SIP BK .
IC825	0ISK670900A	IC,STR/S6709 9S SMPS-CNTR
IC845	0IKE780500K	IC,KIA7805PI 3P(TO-220IS) 5V,1A
⚠ IC847	**0ISH817300B**	**IC,PC817XF3 4D PHOTO COUPLER**
IC880	0ISH122100A	IC,PQ12RF21 4P(TO-220) 12V S/W RE
IC881	0ISH092100A	IC,PQ09RF21 4P 9V S/W REGULATOR
IC882	0ISS790500C	IC,KA7905 TO-220 BK REGULATOR IC
IC883	0IKE780500K	IC,KIA7805PI 3P(TO-220IS) 5V,1A
IC884	0ISS791200A	IC,KA7912 ST REGULATOR IC
⚠ IC886	**0ISK115000A**	**IC,SE115N(LF12) 3P 115V ERROR AMP**
⚠ IC887	**0ISH817300B**	**IC,PC817XF3 4D PHOTO COUPLER**
		TRANSISTOR
QI1	0TR319709AB	TR,KTC3197,TP(KTC388A),KEC
QI2	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QI3	0TR102009AB	TR,KRC102M,TP(KRC1202),KEC
QI4	0TR126609AA	TR,KTA1266-TP-Y (KTA1015) KEC
QI5	0TR126609AA	TR,KTA1266-TP-Y (KTA1015) KEC
QI6	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QI7	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QP10	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QP11	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QP2	0TR102009AB	TR,KRC102M,TP(KRC1202),KEC
QP3	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QP4	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QP5	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QP6	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QP7	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QP8	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QP9	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QS3	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QS4	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QT1	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
QT2	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q03	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q04	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q1	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q2	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q2001	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q2002	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q201	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q202	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q203	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q205	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q3	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q301	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q302	0TR102009AB	TR,KRC102M,TP(KRC1202),KEC
Q302	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q303	0TR102009AB	TR,KRC102M,TP(KRC1202),KEC
Q303	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q304	0TR102009AB	TR,KRC102M,TP(KRC1202),KEC
Q305	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC

The components identified by shading and
mark ⚠ are critical for safety.
Replace only with part number specified.

LOCA. NO	PART NO	DESCRIPTION
Q306	0TR126609AA	TR,KTA1266-TP-Y (KTA1015) KEC
Q307	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q308	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q309	0TR471000AA	TR,2SC4710 SANYO OTOROLA IBA
Q310	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q311	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q312	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q313	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q4	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q401	0TR223800AA	TR,KTC2238A-Y
Q402	0TR188600AA	TR,2SD1886,SANYO
Q403	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q405	0TR127409AB	TR,KTA1274-Y TO-92L TP KEC
Q406	0TR205900AA	TR,KTD2059-O,TO-220IS,100V,5A,KEC
Q410	0TR126609AA	TR,KTA1266-TP-Y (KTA1015) KEC
Q411	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q412	0TR322709AA	TR,KTC3227-Y,TP(KTC1627A),KEC
Q5	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q501	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q503	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q504	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q505	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q6	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q606	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q607	0TR126609AA	TR,KTA1266-TP-Y (KTA1015) KEC
Q608	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q7	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q801	0TR385200AA	TR,2SC3852A SANKEN
Q803	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q825	0TR825000AC	TR,2SB825R TO-220 SANYO
Q845	0TR322709AA	TR,KTC3227-Y,TP(KTC1627A),KEC
Q846	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q847	0TR322809AA	TR,KTC3228-0 TP(KTC2383),KEC
Q848	0TR968000AA	TR,KTA968A-Y KEC
Q849	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q884	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q902B	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q902G	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q902R	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q904B	0TR322900AA	TR,KTC3229 (KTC2068),KEC
Q904G	[illegible]	TR,KTC3229 (KTC2068),KEC
Q904R	[illegible]	TR,KTC3229 (KTC2068),KEC
		DIODE
DI1	0DD859009AA	DIODE,SILICON MA859 TAPING
DP1	0DD414809ED	DIODE,DS4148
DP2	0DD859009AA	DIODE,SILICON MA859 TAPING
DP3	0DD414809ED	DIODE,DS4148
DP4	0DD414809ED	DIODE,DS4148
DS1	0DD414809ED	DIODE,DS4148
DS2	0DD414809ED	DIODE,DS4148
DS3	0DD414809ED	DIODE,DS4148

LOCA. NO	PART NO	DESCRIPTION
DT75	0DD414809ED	DIODE,DS4148
D1	0DD414809ED	DIODE,DS4148
D1D	0DD247109AA	DIODE,1S2471
D2	0DD414809ED	DIODE,DS4148
D3	0DD414809ED	DIODE,DS4148
D303	0DD400509AA	DIODE,1N4005 GP
D304	0DD247109AA	DIODE,1S2471
D305	0DD247109AA	DIODE,1S2471
D306	0DD400309AD	DIODE,IN4003A RECT
D307	0DD247109AA	DIODE,1S2471
D4	0DD414809ED	DIODE,DS4148
D401	0DD410000AC	DIODE,RU4DS.LF-L1
D402	0DD410000AD	DIODE,RU4AM,LF-L1
D403	0DD110000AD	DIODE,V11N
D404	0DD110000AD	DIODE,V11N
D406	0DD400309AD	DIODE,IN4003A RECT
D407	0DD400309AD	DIODE,IN4003A RECT
D408	0DD100009AE	DIODE,RU-1A V
D409	0DD200009AF	DIODE,RU-2MV
D410	0DD247109AA	DIODE,1S2471
D412	0DD247109AA	DIODE,1S2471
D413	0DD247109AA	DIODE,1S2471
D414	0DD247109AA	DIODE,1S2471
D471	0DD414809ED	DIODE,DS4148
D472	0DD414809ED	DIODE,DS4148
D5	0DD414809ED	DIODE,DS4148
D501	0DD414809ED	DIODE,DS4148
D502	0DD414809ED	DIODE,DS4148
D503	0DD414809ED	DIODE,DS4148
D504	0DD414809ED	DIODE,DS4148
D505	0DD414809ED	DIODE,DS4148
D6	0DD414809ED	DIODE,DS4148
D604	0DD414809ED	DIODE,DS4148
D605	0DD414809ED	DIODE,DS4148
D606	0DD414809ED	DIODE,DS4148
D607	0DD414809ED	DIODE,DS4148
D7	0DD414809ED	DIODE,DS4148
D8	0DD414809ED	DIODE,DS4148
D801	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS
D802	0DD100009AM	DIODE,EU1ZV
D804	0DD100009AM	DIODE,EU1ZV
D805	0DD100009AM	DIODE,EU1ZV
D806	0DD100009AL	DIODE,EH-1ZV
D807	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS
D808	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS
D809	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS
D810	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS
D821	0DD560000AA	DIODE,D5SB60 BRIDGE (5A/600V)S.D.G
D825	0DD100009AL	DIODE,EH-1ZV
D826	0DD100009AM	DIODE,EU1ZV
D841	0DD420000BB	DIODE,D4L20U
D842	0DD420000BB	DIODE,D4L20U

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LOCA. NO	PART NO	DESCRIPTION
D845	0DD414809ED	DIODE.DS4148
D847	0DD414809ED	DIODE.DS4148
D848	0DD060009AC	DIODE.TVR06J 0.6A/600V 250NS
D849	0DD414809ED	DIODE.DS4148
D882	0DD100009AP	DIODE.EG1ZV FR 0.8A//200V(TA)
D884	0DD420000BB	DIODE.D4L20U
D885	0DD060009AC	DIODE.TVR06J 0.6A/600V 250NS
D886	0DD420000BB	DIODE.D4L20U
D886	0DD060009AC	DIODE.TVR06J 0.6A/600V 250NS
D889	0DD420000BB	DIODE.D4L20U
D890	0DD410000AD	DIODE.RU4AM.LF-L1
D901B	0DD247109AA	DIODE.1S2471
D901G	0DD247109AA	DIODE.1S2471
D901R	0DD247109AA	DIODE,1S2471
ZDP1	0DZ240009BC	DIODE ZENER MTZ2.4B 2.4V K-ROHM TP
ZDP2	0DZ510009AB	DIODE ZENER,MTZ5.1B
ZDP3	0DZ510009AB	DIODE ZENER,MTZ5.1B
ZD01	0DZ510009AB	DIODE ZENER,MTZ5.1B
ZD101	0DZ510009AB	DIODE ZENER,MTZ5.1B
ZD102	0DZ330009BA	DIODE ZENER,HZT33
ZD103	0DZ510009AB	DIODE ZENER,MTZ5.1B
ZD151	0DZ510009AB	DIODE ZENER,MTZ5.1B
ZD2004	0DZ120009AA	DIODE ZENER,Z12BM TA
ZD301	0DZ120009AA	DIODE ZENER,Z12BM TA
ZD301	0DZ510009AB	DIODE ZENER,MTZ5.1B
ZD304	0DZ510009AB	DIODE ZENER,MTZ5.1B
ZD401	0DZ240009BB	DIODE ZENER,MTZ24B
ZD402	0DZ510009AB	DIODE ZENER,MTZ5.1B
ZD403	0DZ360009DA	DIODE ZENER,MTZ3.6B
ZD404	0DZ150009BE	DIODE ZENER,MTZ15B TP ROHM
ZD471	0DZ560009AA	DIODE ZENER,MTZ5.6B
ZD501	0DZ510009AB	DIODE ZENER,MTZ5.1B
ZD502	0DZ510009AB	DIODE ZENER,MTZ5.1B
ZD801	0DZ750009AA	DIODE ZENER,MTZ7.5B
ZD803	0DZ120009AA	DIODE ZENER,Z12BM TA
ZD841	0DZ120009AA	DIODE ZENER,Z12BM TA
ZD856	0DZ120009AA	DIODE ZENER,Z12BM TA
CAPACITOR		
AC1	181-026A	CAPACITOR,C-ARRAY (9*100P)
CI10	0CE105DK618	C,ELECTROLYTIC 1UF STD 50V M
CI12	0CE475DK618	C,ELECTROLYTIC 4.7UF STD 50V M
CI13	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CI14	0CE225DK618	C,ELECTROLYTIC 2.2UF STD 50V M
CI18	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
CI19	0CX4700K409	C,TUBULA(T.C) 47PF 50V J
CI20	0CX4700K409	C,TUBULA(T.C) 47PF 50V J
CI22	0CE227DF618	C,ELECTROLYTIC 220UF STD 16V M
CI5	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CI9	0CE106DK618	C,ELECTROLYTIC 10UF STD 50V M
CP13	0CE224DK618	C,ELECTROLYTIC 0.22UF STD 50V M
CP16	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M

LOCA. NO	PART NO	DESCRIPTION
CP18	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CP19	0CE474DK618	C,ELECTROLYTIC 0.47UF STD 50V M
CP21	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
CP23	0CQ1021N509	C,POLYESTER(MYLAR) 0.001U 100V K
CP25	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CP26	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CP27	0CQ3321N509	C,POLYESTER(MYLAR) 0.0033U 100V K
CP28	0CE684DK618	C,ELECTROLYTIC 0.68UF STD 50V M
CP30	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
CP31	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
CP38	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CP39	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
CP41	0CE106DK618	C,ELECTROLYTIC 10UF STD 50V M
CP42	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CP43	0CE1051K636	C,ELECTROLYTIC 1UF SM 50V M
CP44	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
CP45	0CE1051K636	C,ELECTROLYTIC 1UF SM 50V M
CP46	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
CP48	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CP52	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CP59	0CE105DK618	C,ELECTROLYTIC 1UF STD 50V M
CP60	0CE105DK618	C,ELECTROLYTIC 1UF STD 50V M
CP61	0CE105DK618	C,ELECTROLYTIC 1UF STD 50V M
CP63	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CP65	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CP70	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CP71	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
CP72	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
CP73	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
CP75	0CE105DK618	C,ELECTROLYTIC 1UF STD 50V M
CP76	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CP8	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
CP81	0CE105DK618	C,ELECTROLYTIC 1UF STD 50V M
CP82	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
CP83	0CE477DF618	C,ELECTROLYTIC 470UF STD 16V M
CP86	0CE108DF618	C,ELECTROLYTIC 1000UF STD 16V M
CP88	0CE108DD618	C,ELECTROLYTIC 1000UF STD 10V M
CP89	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CP90	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CP91	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
CS19	0CE475DK618	C,ELECTROLYTIC 4.7UF STD 50V M
CS20	0CE475DK618	C,ELECTROLYTIC 4.7UF STD 50V M
CS21	0CE475DK618	C,ELECTROLYTIC 4.7UF STD 50V M
CS22	0CE475DK618	C,ELECTROLYTIC 4.7UF STD 50V M
CS23	0CE106DF618	C,ELECTROLYTIC 10UF STD 16V M
CS29	0CE106DF618	C,ELECTROLYTIC 10UF STD 16V M
CS30	0CE106DF618	C,ELECTROLYTIC 10UF STD 16V M
CS31	0CE106DF618	C,ELECTROLYTIC 10UF STD 16V M
CS37	0CQ3342K439	C,POLYESTER(MYLAR) 0.33UF S 50V J
CS38	0CQ3342K439	C,POLYESTER(MYLAR) 0.33UF S 50V J
CS41	0CE106DF618	C,ELECTROLYTIC 10UF STD 16V M
CS48	0CC0200K115	C,CERAMIC(TEMP COMP) 2P 50V D

The components identified by shading and mark ⚠ are critical for safety.
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LOCA. NO	PART NO	DESCRIPTION
CS49	0CC0200K115	C.CERAMIC(TEMP COMP) 2P 50V D
CS52	0CE475DK618	C.ELECTROLYTIC 4.7UF STD 50V M
CS53	0CE475DK618	C.ELECTROLYTIC 4.7UF STD 50V M
CS54	0CE227DF618	C.ELECTROLYTIC 220UF STD 16V M
CS56	0CE227DF618	C.ELECTROLYTIC 220UF STD 16V M
CS60	0CE335DK618	C.ELECTROLYTIC 3.3UF STD 50V M
CS61	0CN1030F679	C.TUBULA(HIGH DIELE) 0.01MF 16V M
CS62	0CE227DF618	C.ELECTROLYTIC 220UF STD 16V M
CS63	0CQ6832K439	C,POLYESTER(MYLAR) 0.0680UF S 50V J
CS64	0CE335DK618	C.ELECTROLYTIC 3.3UF STD 50V M
CS65	0CE337DF618	C.ELECTROLYTIC 330UF STD 16V M
CS66	0CE335DK618	C.ELECTROLYTIC 3.3UF STD 50V M
CS67	0CQ6832K439	C,POLYESTER(MYLAR) 0.0680UF S 50V J
CT75	0CE227DF618	C.ELECTROLYTIC 220UF STD 16V M
CT76	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
CT77	0CN1030F679	C.TUBULA(HIGH DIELE) 0.01MF 16V M
CT79	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
CT80	0CN1030F679	C.TUBULA(HIGH DIELE) 0.01MF 16V M
CT81	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
CT82	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
CT83	0CQ1042K439	C.POLYESTER(MYLAR) 0.1UF S 50V J
CT84	0CE476DF618	C.ELECTROLYTIC 47UF STD 16V M
CT85	0CC1500K415	C.CERAMIC(TEMP COMP) 15P 50V J
CT86	0CX8R20K519	C.TUBULA(T.C) 8.2P 50V K C
CT87	0CN1040K949	C.TUBULA(HIGH DIELE) 0.1M 50V Z
CT88	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
CT90	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
CT92	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
CT94	0CE107DF618	C.ELECTROLYTIC 100UF STD 16V M
CT95	0CN1020K519	C.TUBULA(HIGH DIELE) 1000PF 50V K
C01	0CE476DD618	C.ELECTROLYTIC 47UF STD 10V M
C02	0CN1030F679	C.TUBULA(HIGH DIELE) 0.01MF 16V M
C1	0CN1020K519	C.TUBULA(HIGH DIELE) 1000PF 50V K
C10	0CN1030F679	C.TUBULA(HIGH DIELE) 0.01MF 16V M
C101	0CN1030F679	C.TUBULA(HIGH DIELE) 0.01MF 16V M
C102	0CE476DF618	C.ELECTROLYTIC 47UF STD 16V M
C103	0CN1040K949	C.TUBULA(HIGH DIELE) 0.1M 50V Z
C104	0CE106DK618	C.ELECTROLYTIC 10UF STD 50V M
C105	0CN1030F679	C.TUBULA(HIGH DIELE) 0.01MF 16V M
C106	0CE108DF618	C.ELECTROLYTIC 1000UF STD 16V M
C107	0CN1030F679	C.TUBULA(HIGH DIELE) 0.01MF 16V M
C108	0CE225DK618	C.ELECTROLYTIC 2.2UF STD 50V M
C109	0CN1030F679	C.TUBULA(HIGH DIELE) 0.01MF 16V M
C11	0CE335DK618	C.ELECTROLYTIC 3.3UF STD 50V M
C11D	0CE106DK618	C.ELECTROLYTIC 10UF STD 50V M
C110	0CE227DF618	C.ELECTROLYTIC 220UF STD 16V M
C12	0CN1030F679	C.TUBULA(HIGH DIELE) 0.01MF 16V M
C13	0CE224DK618	C.ELECTROLYTIC 0.22UF STD 50V M
C14	0CE224DK618	C.ELECTROLYTIC 0.22UF STD 50V M
C151	0CN1030F679	C.TUBULA(HIGH DIELE) 0.01MF 16V M
C152	0CE106DK618	C.ELECTROLYTIC 10UF STD 50V M
C153	0CN1040K949	C.TUBULA(HIGH DIELE) 0.1M 50V Z

LOCA. NO	PART NO	DESCRIPTION
C154	0CE476DF618	C.ELECTROLYTIC 47UF STD 16V M
C155	0CN1030F679	C.TUBULA(HIGH DIELE) 0.01MF 16V M
C156	0CE108DF618	C.ELECTROLYTIC 1000UF STD 16V M
C157	0CN1030F679	C.TUBULA(HIGH DIELE) 0.01MF 16V M
C158	0CE225DK618	C.ELECTROLYTIC 2.2UF STD 50V M
C17	0CC4700K415	C.CERAMIC(TEMP COMP) 47P 50V J
C17	0CC5100K415	C.CERAMIC(TEMP COMP) 51P 50V J *LGESY
C18	0CC6800K415	C.CERAMIC(TEMP COMP) 68P 50V J
C18	0CC8200K415	C.CERAMIC(TEMP COMP) 82P 50V J *LGESY
C2	0CN1030F679	C.TUBULA(HIGH DIELE) 0.01MF 16V M
C20D	0CE106DK618	C.ELECTROLYTIC 10UF STD 50V M
C20D	0CE106DK618	C.ELECTROLYTIC 10UF STD 50V M
C2001	0CE225DK618	C.ELECTROLYTIC 2.2UF STD 50V M
C2002	0CE225DK618	C.ELECTROLYTIC 2.2UF STD 50V M
C2003	0CE107DD618	C.ELECTROLYTIC 100UF STD 10V M
C2008	0CE227DF618	C.ELECTROLYTIC 220UF STD 16V M
C201	0CE106DK618	C.ELECTROLYTIC 10UF STD 50V M
C2011	0CE227DF618	C.ELECTROLYTIC 220UF STD 16V M
C2017	0CN3310K519	C.TUBULA(HIGH DIELE) 330P 50V K
C2018	0CN3310K519	C.TUBULA(HIGH DIELE) 330P 50V K
C2019	0CN3310K519	C.TUBULA(HIGH DIELE) 330P 50V K
C2020	0CN3310K519	C.TUBULA(HIGH DIELE) 330P 50V K
C2021	0CN3310K519	C.TUBULA(HIGH DIELE) 330P 50V K
C2022	0CK1030K945	C.CERAMIC(HIGH DIELE) 0.01MF 50V Z
C2023	0CE108DJ618	C.ELECTROLYTIC 1000UF STD 35V M
C2024	0CE108DJ618	C.ELECTROLYTIC 1000UF STD 35V M
C2025	0CK1030K945	C.CERAMIC(HIGH DIELE) 0.01MF 50V Z
C2026	0CN1510K519	C.TUBULA(HIGH DIELE) 150P 50V K
C2027	0CN1510K519	C.TUBULA(HIGH DIELE) 150P 50V K
C2028	0CN1510K519	C.TUBULA(HIGH DIELE) 150P 50V K
C2029	0CK1030K945	C.CERAMIC(HIGH DIELE) 0.01MF 50V Z
C203	0CE475DK618	C.ELECTROLYTIC 4.7UF STD 50V M
C2030	0CE108DJ618	C.ELECTROLYTIC 1000UF STD 35V M
C2031	0CE108DJ618	C.ELECTROLYTIC 1000UF STD 35V M
C2032	0CK1030K945	C.CERAMIC(HIGH DIELE) 0.01MF 50V Z
C2033	0CN1510K519	C.TUBULA(HIGH DIELE) 150P 50V K
C2034	0CN1510K519	C.TUBULA(HIGH DIELE) 150P 50V K
C2035	0CN1510K519	C.TUBULA(HIGH DIELE) 150P 50V K
C2036	0CN3310K519	C.TUBULA(HIGH DIELE) 330P 50V K
C204	0CE106DK618	C.ELECTROLYTIC 10UF STD 50V M
C2052	0CE477DD618	C.ELECTROLYTIC 470UF STD 10V M
C2056	0CE105DK618	C.ELECTROLYTIC 1UF STD 50V M
C2057	0CE107DD618	C.ELECTROLYTIC 100UF STD 10V M
C206	0CE475DK618	C.ELECTROLYTIC 4.7UF STD 50V M
C2063	0CE477DD618	C.ELECTROLYTIC 470UF STD 10V M
C208	0CE106DK618	C.ELECTROLYTIC 10UF STD 50V M
C210	0CE475DK618	C.ELECTROLYTIC 4.7UF STD 50V M
C2101	0CE227DD618	C.ELECTROLYTIC 220UF STD 10V M
C2103	0CE477DD618	C.ELECTROLYTIC 470UF STD 10V M
C212	0CE475DK618	C.ELECTROLYTIC 4.7UF STD 50V M
C213	0CE106DK618	C.ELECTROLYTIC 10UF STD 50V M
C215	0CE475DK618	C.ELECTROLYTIC 4.7UF STD 50V M

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LOCA. NO	PART NO	DESCRIPTION
C217	0CE475DK618	C,ELECTROLYTIC 4.7UF STD 50V M
C218	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
C219	0CN1030F679	C,TUBULA(HIGH DIELE) 0.01MF 16V M
C220	0CE106DK618	C,ELECTROLYTIC 10UF STD 50V M
C2203	0CE335DK618	C,ELECTROLYTIC 3.3UF STD 50V M
C2204	0CE107DD618	C,ELECTROLYTIC 100UF STD 10V M
C2206	0CE107DD618	C,ELECTROLYTIC 100UF STD 10V M
C221	0CE106DK618	C,ELECTROLYTIC 10UF STD 50V M
C222	0CE226DH618	C,ELECTROLYTIC 22UF STD 25V M
C224	0CE227DF618	C,ELECTROLYTIC 220UF STD 16V M
C225	0CE106DK618	C,ELECTROLYTIC 10UF STD 50V M
C226	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
C2301	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
C2302	0CE1061H636	C,AL.ELECTROLYTIC 10UF SM 25V M
C2311	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
C2312	0CE1061H636	C,AL.ELECTROLYTIC 10UF SM 25V M
C2321	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
C2322	0CE1061H636	C,AL.ELECTROLYTIC 10UF SM 25V M
C2331	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
C2332	0CE1061H636	C,AL.ELECTROLYTIC 10UF SM 25V M
C2341	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
C2342	0CE1061H636	C,AL.ELECTROLYTIC 10UF SM 25V M
C2351	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
C2352	0CE1061H636	C,AL.ELECTROLYTIC 10UF SM 25V M
C2374	0CE227DD618	C,ELECTROLYTIC 220UF STD 10V M
C2376	0CE227DD618	C,ELECTROLYTIC 220UF STD 10V M
C239	0CE477DF618	C,ELECTROLYTIC 470UF STD 16V M
C239	0CE477DF618	C,ELECTROLYTIC 470UF STD 16V M
C24	0CN1030F679	C,TUBULA(HIGH DIELE) 0.01MF 16V M
C241	0CN1030F679	C,TUBULA(HIGH DIELE) 0.01MF 16V M
C242	0CE108DF618	C,ELECTROLYTIC 1000UF STD 16V M
C243	0CE477DF618	C,ELECTROLYTIC 470UF STD 16V M
C244	0CE227DF618	C,ELECTROLYTIC 220UF STD 16V M
C245	0CE475DK618	C,ELECTROLYTIC 4.7UF STD 50V M
C25	0CE227DF618	C,ELECTROLYTIC 220UF STD 16V M
C255	0CE106DK618	C,ELECTROLYTIC 10UF STD 50V M
C26	0CN1020K519	C,TUBULA(HIGH DIELE) 1000PF 50V K
C26D	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
C261	0CE475DK618	C,ELECTROLYTIC 4.7UF STD 50V M
C262	0CE475DK618	C,ELECTROLYTIC 4.7UF STD 50V M
C28	0CX4700K409	C,TUBULA(T.C) 47PF 50V J
C29	0CN1010K519	C,TUBULA(HIGH DIELE) 100PF 50V K
C3	0CN1030F679	C,TUBULA(HIGH DIELE) 0.01MF 16V M
C3D	0CE106DK618	C,ELECTROLYTIC 10UF STD 50V M
C301	0CE337DF618	C,ELECTROLYTIC 330UF STD 16V M
C302	0CQ2221N509	C,POLYESTER(MYLAR) 0.0022U 100V K
C303	0CQ1031N509	C,POLYESTER(MYLAR) 0.01U 100V K
C304	0CQ5642K439	C,POLYESTER(MYLAR) 0.5600UF S 50V J
C305	0CE335DK618	C,ELECTROLYTIC 3.3UF STD 50V M
C306	0CE228DK650	C,ELECTROLYTIC 2200UF STD 50V M
C307	0CE337DK618	C,ELECTROLYTIC 330UF STD 50V M
C308	0CQ1031N509	C,POLYESTER(MYLAR) 0.01U 100V K

LOCA. NO	PART NO	DESCRIPTION
C309	0CE337DK618	C,ELECTROLYTIC 330UF STD 50V M
C310	0CC2000K415	C,CERAMIC(TEMP COMP) 20P 50V J
C312	0CQ1041N509	C,POLYESTER(MYLAR) 0.1MF 100V L
C313	0CE106DF618	C,ELECTROLYTIC 10UF STD 16V M
C315	0CE476DK618	C,ELECTROLYTIC 47UF STD 50V M
C318	0CQ3342K439	C,POLYESTER(MYLAR) 0.33UF S 50V J
C319	181-064P	C,ELECTROLYTIC 10MF 16V
C32D	0CE227DF618	C,ELECTROLYTIC 220UF STD 16V M
C320	0CQ3342K439	C,POLYESTER(MYLAR) 0.33UF S 50V J
C321	0CQ5642K439	C,POLYESTER(MYLAR) 0.5600UF S 50V J
C322	181-015K	C,MPP 1600V 0.0091uF H
C324	0CK1030K945	C,CERAMIC(HIGH DIELE) 0.01MF 50V Z
C325	0CK1030K945	C,CERAMIC(HIGH DIELE) 0.01MF 50V Z
C327	0CC2000K415	C,CERAMIC(TEMP COMP) 20P 50V J
C328	0CE476DK618	C,ELECTROLYTIC 47UF STD 50V M
C330	181-488H	C,POLYPROPYLENE 0.47UF D 100V J
C371	0CE105DK618	C,ELECTROLYTIC 1UF STD 50V M
C372	0CE105DK618	C,ELECTROLYTIC 1UF STD 50V M
C373	0CN1810K519	C,TUBULA(HIGH DIELE) 180PF 50V K
C4	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
C4D	0CE474DK618	C,ELECTROLYTIC 0.47UF STD 50V M
C401	0CK6820W510	C,CERAMIC(HIGH DIELE) 6800P 500V K
C402	0CK3310W515	C,CERAMIC(HIGH DIELE) 330P 500V K
C403	0CE107DN618	C,ELECTROLYTIC 100UF STD 100V M
C405	181-015M	CAPACITOR MPP 1600V 0.01UF H
C406	181-010B	CAPACITOR PP 400V 0.056UF J
C407	181-015K	C,MPP 1600V 0.0091uF H
C408	181-013R	CAPACITOR MPP 400V 0.47UF J
C409	181-013R	CAPACITOR MPP 400V 0.47UF J
C411	181-014R	C,POLYESTER MPP 1600V 0.068UF J
C412	0CE5651K652	C,ELECTROLYTIC 5.6UF SM 50V M
C416	181-004B	CAPACITOR, CE 400V 120UF M 2LEAD(85)
C417	0CK1810W515	C,CERAMIC(HIGH DIELE) 180P 500V K
C418	0CE477DK618	C,ELECTROLYTIC 470UF STD 50V M
C419	0CK1030K945	C,CERAMIC(HIGH DIELE) 0.01MF 50V Z
C420	181-009D	C,PP 200V 0.068UF J
C421	0CK2220W515	C,CERAMIC(HIGH DIELE) 2200PF 500V K
C422	0CK22101515	C,CERAMIC(HIGH DIELE) 220P 1KV K
C423	0CE228DF618	C,ELECTROLYTIC 2200UF STD 16V M
C424	0CK1030K945	C,CERAMIC(HIGH DIELE) 0.01MF 50V Z
C425	0CE476DK618	C,ELECTROLYTIC 47UF STD 50V M
C426	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C427	0CE476DK618	C,ELECTROLYTIC 47UF STD 50V M
C428	0CE477DF618	C,ELECTROLYTIC 470UF STD 16V M
C429	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C430	0CQ3342K439	C,POLYESTER(MYLAR) 0.33UF S 50V J
C431	0CK1810W515	C,CERAMIC(HIGH DIELE) 180P 500V K
C432	0CE227DP61A	C,ELECTROLYTIC 220UF STD 160V M
C433	0CK1030K945	C,CERAMIC(HIGH DIELE) 0.01MF 50V Z
C434	0CQ2242K439	C,POLYESTER(MYLAR) 0.22UF S 50V J
C435	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C436	0CQ1021N509	C,POLYESTER(MYLAR) 0.001U 100V K

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LOCA. NO	PART NO	DESCRIPTION
C437	0CK1030K945	C,CERAMIC(HIGH DIELE) 0.01MF 50V Z
C438	0CK1020W515	C,CERAMIC(HIGH DIELE) 1000PF 500V K
C439	181-009W	CAPACITOR PP 200V 0.056UF K
C440	0CE106DF618	C,ELECTROLYTIC 10UF STD 16V M
C441	0CE475DK618	C,ELECTROLYTIC 4.7UF STD 50V M
C442	0CQ1031N509	C,POLYESTER(MYLAR) 0.01U 100V K
C452	0CE108DJ618	C,ELECTROLYTIC 1000UF STD 35V M
C453	0CK1030K945	C,CERAMIC(HIGH DIELE) 0.01MF 50V Z
C454	0CE108DJ618	C,ELECTROLYTIC 1000UF STD 35V M
C455	0CK1030K945	C,CERAMIC(HIGH DIELE) 0.01MF 50V Z
C471	0CN1030F679	C,TUBULA(HIGH DIELE) 0.01MF 16V M
C472	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
C473	0CN8220F579	C,TUBULA(HIGH DIELE) 8200P 16V K
C474	0CN2210K519	C,TUBULA(HIGH DIELE) 220PF 50V K
C475	0CQ1031N509	C,POLYESTER(MYLAR) 0.01U 100V K
C475	0CQ5621N509	C,POLYESTER(MYLAR) 0.0056U 100V K 'LGESY
C476	0CE105DK618	C,ELECTROLYTIC 1UF STD 50V M
C477	0CN1010K519	C,TUBULA(HIGH DIELE) 100PF 50V K
C478	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C501	0CQ1031N509	C,POLYESTER(MYLAR) 0.01U 100V K
C502	0CN1030F679	C,TUBULA(HIGH DIELE) 0.01MF 16V M
C503	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
C504	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C505	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C506	0CE104DK618	C,ELECTROLYTIC 0.1UF STD 50V M
C507	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C508	0CN1030F679	C,TUBULA(HIGH DIELE) 0.01MF 16V M
C509	0CE227DF618	C,ELECTROLYTIC 220UF STD 16V M
C510	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C511	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C512	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C513	0CE475DK618	C,ELECTROLYTIC 4.7UF STD 50V M
C514	0CQ1031N509	C,POLYESTER(MYLAR) 0.01U 100V K
C515	0CE225DK618	C,ELECTROLYTIC 2.2UF STD 50V M
C516	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C517	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C518	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C519	0CN1030F679	C,TUBULA(HIGH DIELE) 0.01MF 16V M
C520	0CE106DK618	C,ELECTROLYTIC 10UF STD 50V M
C521	0CE335DK618	C,ELECTROLYTIC 3.3UF STD 50V M
C522	0CC1200K415	C,CERAMIC(TEMP COMP) 12P 50V J
C523	0CN1030F679	C,TUBULA(HIGH DIELE) 0.01MF 16V M
C524	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
C525	0CE475DK618	C,ELECTROLYTIC 4.7UF STD 50V M
C526	0CE334DK618	C,ELECTROLYTIC 0.33UF STD 50V M
C527	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C528	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
C529	0CE227DF618	C,ELECTROLYTIC 220UF STD 16V M
C530	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
C531	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
C533	0CE226DK618	C,ELECTROLYTIC 22UF STD 50V M
C535	0CN1030F679	C,TUBULA(HIGH DIELE) 0.01MF 16V M

LOCA. NO	PART NO	DESCRIPTION
C536	0CN1030F679	C,TUBULA(HIGH DIELE) 0.01MF 16V M
C538	0CN1030F679	C,TUBULA(HIGH DIELE) 0.01MF 16V M
C539	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C540	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C541	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C542	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
C6	0CE225DK618	C,ELECTROLYTIC 2.2UF STD 50V M
C614	0CE225DK618	C,ELECTROLYTIC 2.2UF STD 50V M
C618	0CE107DK618	C,ELECTROLYTIC 100UF STD 50V M
C619	0CC0500K115	C,CERAMIC(TEMP COMP) 5P 50V D
C621	0CQ3921N409	C,POLYESTER(MYLAR) 0.0039U 100V J
C622	0CE476DK618	C,ELECTROLYTIC 47UF STD 50V M
C623	0CE106DK618	C,ELECTROLYTIC 10UF STD 50V M
C624	0CE106DK618	C,ELECTROLYTIC 10UF STD 50V M
C625	0CE107DK618	C,ELECTROLYTIC 100UF STD 50V M
C626	0CE476DK618	C,ELECTROLYTIC 47UF STD 50V M
C627	0CE106DK618	C,ELECTROLYTIC 10UF STD 50V M
C628	0CQ3921N409	C,POLYESTER(MYLAR) 0.0039U 100V J
C629	0CE477DK618	C,ELECTROLYTIC 470UF STD 50V M
C630	0CE477DK618	C,ELECTROLYTIC 470UF STD 50V M
C631	0CE476DK618	C,ELECTROLYTIC 47UF STD 50V M
C636	0CE107DK618	C,ELECTROLYTIC 100UF STD 50V M
C637	0CE225DK618	C,ELECTROLYTIC 2.2UF STD 50V M
C638	0CC0500K115	C,CERAMIC(TEMP COMP) 5P 50V D
C639	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C640	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C641	0CE226DK618	C,ELECTROLYTIC 22UF STD 50V M
C7	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
C7D	0CE106DK618	C,ELECTROLYTIC 10UF STD 50V M
C8	0CX6200K409	C,TUBULA(T.C) 62PF 50V J
⚠ C802	0CQZVBK002C	C,POLYESTER A.C 275V 0.22UF K
C803	0CQZVBK002D	C,POLYESTER A.C 275V 0.47UF K (S=22.5)
C809	181-001U	CAPACITOR,CE 450V 470UF M LUG(85)
C810	0CE337DF618	C,ELECTROLYTIC 330UF STD 16V M
C811	0CE476DN618	C,ELECTROLYTIC 47UF STD 100V M
C812	0CQ1021N509	C,POLYESTER(MYLAR) 0.001U 100V K
C813	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
C814	181-014Z	C,MPP 1.6KV 0.0033UF J
C824	0CK4710W515	C,CERAMIC(HIGH DIELE) 470PF 500V K
C825	0CE477DF618	C,ELECTROLYTIC 470UF STD 16V M
C826	0CQ1021N509	C,POLYESTER(MYLAR) 0.001U 100V K
C827	0CE337DF618	C,ELECTROLYTIC 330UF STD 16V M
C828	0CE227DF618	C,ELECTROLYTIC 220UF STD 16V M
C829	181-014Z	C,MPP 1.6KV 0.0033UF J
⚠ C838	181-120H	CAPACITOR [illegible] ACT 4KV E 152M FL10
⚠ C839	181-120H	CAPACITOR [illegible] ACT 4KV E 152M FL10
C842	0CE228DJ61A	C,AL.ELECTROLYTIC 2200UF STD 35V M
C843	0CE228DJ61A	C,AL.ELECTROLYTIC 2200UF STD 35V M
C847	0CE108DF618	C,ELECTROLYTIC 1000UF STD 16V M
C848	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
C849	0CE228DJ61A	C,AL.ELECTROLYTIC 2200UF STD 35V M
C850	0CE228DJ61A	C,AL.ELECTROLYTIC 2200UF STD 35V M

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Replace only with part number specified.

LOCA. NO	PART NO	DESCRIPTION
C852	0CE478DH650	C,ELECTROLYTIC 4700UF STD 25V M
C853	0CE476DN618	C,ELECTROLYTIC 47UF STD 100V M
C854	0CE108DF618	C,ELECTROLYTIC 1000UF STD 16V M
C856	0CE108DF618	C,ELECTROLYTIC 1000UF STD 16V M
C862	0CE106DN618	C,ELECTROLYTIC 10UF STD 100V M
C864	0CE108DJ618	C,ELECTROLYTIC 1000UF STD 35V M
C865	0CE108DD618	C,ELECTROLYTIC 1000UF STD 10V M
C867	0CQ1042K439	C,POLYESTER(MYLAR) 0.1UF S 50V J
C872	0CQ1041N509	C,POLYESTER(MYLAR) 0.1MF 100V L
C873	0CK10201515	C,CERAMIC(HIGH DIELE) 1000P 1KV K
C875	0CE2251K636	C,ELECTROLYTIC 2.2UF SM 50V M
C876	0CE2251K636	C.ELECTROLYTIC 2.2UF SM 50V M
C878	0CE2251K636	C,ELECTROLYTIC 2.2UF SM 50V M
C881	0CE476DF618	C,ELECTROLYTIC 47UF STD 16V M
C882	0CE477BH618	C,ELECTROLYTIC 470UF KME TYPE 25V M
C883	0CE477DF618	C,ELECTROLYTIC 470UF STD 16V M
C884	0CE477DF618	C,ELECTROLYTIC 470UF STD 16V M
C885	0CE477DF618	C,ELECTROLYTIC 470UF STD 16V M
C886	0CE477DF618	C,ELECTROLYTIC 470UF STD 16V M
C890	0CE477DF618	C,ELECTROLYTIC 470UF STD 16V M
C893	0CE228DJ61A	C,AL.ELECTROLYTIC 2200UF STD 35V M
C894	0CE228DJ61A	C,AL.ELECTROLYTIC 2200UF STD 35V M
C896	0CE228DJ61A	C,AL.ELECTROLYTIC 2200UF STD 35V M
C897	0CE228DJ61A	C,AL.ELECTROLYTIC 2200UF STD 35V M
C898	181-001A	C,ELECTROLYTIC 200V 470UF M
C899	0CE107BP61A	C,ELECTROLYTIC 100UF KME 160V M
C9	0CX6200K409	C,TUBULA(T.C) 62PF 50V J
C9D	0CE106DK618	C,ELECTROLYTIC 10UF STD 50V M
C901B	0CN1810K519	C,TUBULA(HIGH DIELE) 180PF 50V K
C901G	0CN1810K519	C,TUBULA(HIGH DIELE) 180PF 50V K
C901R	0CN1210K519	C,TUBULA(HIGH DIELE) 120P 50V K
C902B	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
C902G	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
C902R	0CE107DF618	C,ELECTROLYTIC 100UF STD 16V M
C903B	0CE1061S630	C,ELECTROLYTIC 10M SM 315V M
C903G	0CE1061S630	C,ELECTROLYTIC 10M SM 315V M
C903R	0CE1061S630	C,ELECTROLYTIC 10M SM 315V M
C904B	181-033T	CAPACITOR,2KV B 222K TP7.5
C904G	181-033T	CAPACITOR,2KV B 222K TP7.5
C904R	181-033T	CAPACITOR,2KV B 222K TP7.5

FERRITE CORE

LOCA. NO	PART NO	DESCRIPTION
	6210VH0001A	CORE,FERRITE NI-ZN FERRITE,BNF-18(K-150)
FB801	125-022K	CORE,FERRITE 1UH
FB802	125-022K	CORE,FERRITE 1UH
FB803	125-022K	CORE,FERRITE 1UH
FB825	125-022K	CORE,FERRITE 1UH
FB841	125-123A	CORE,FERRITE BFD3565R2F
FB842	125-123A	CORE,FERRITE BFD3565R2F
FB885	125-123A	CORE,FERRITE BFD3565R2F
FB901B	125-022K	CORE,FERRITE 1UH
FB901G	125-022K	CORE,FERRITE 1UH
FB901R	125-022K	CORE.FERRITE 1UH
FB902B	125-123A	CORE,FERRITE BFD3565R2F
FB902G	125-123A	CORE,FERRITE BFD3565R2F
FB902R	125-123A	CORE,FERRITE BFD3565R2F

FUSE

LOCA. NO	PART NO	DESCRIPTION
⚠ FB881	131-096D	FUSE,MICRO 125V 3.0A
⚠ FB884	131-096D	FUSE,MICRO 125V 3.0A
⚠ FB886	131-096D	FUSE,MICRO 125V 3.0A
⚠ F801	0FT4001B53C	FUSE,TIME LAG,4000MA 250 V 5.2X20 CY/CE SEMK
⚠ F841A	0FT3151B51B	FUSE,TIME LAG,3151MA 250 V 5.2X20 CY/GL KS /
⚠ F842A	0FT3151B51B	FUSE,TIME LAG,3151MA 250 V 5.2X20 CY/GL KS /
⚠ F881A	0FT3151B51B	FUSE,TIME LAG,3151MA 250 V 5.2X20 CY/GL KS /
⚠ F883A	0FT3151B51B	FUSE,TIME LAG,3151MA 250 V 5.2X20 CY/GL KS /
⚠ F884A	0FT3151B51B	FUSE,TIME LAG,3151MA 250 V 5.2X20 CY/GL KS /

COIL & TRANSFORMER

LOCA. NO	PART NO	DESCRIPTION
DL1	150-Y03B	COIL,DELAY LINE 350NS
LI1	150-C01G	COIL,CHOKE 1.0UH A 1105
LI2	150-C01C	COIL,CHOKE 0.48UH A 1105
LI4	0LA0102K119	INDUCTOR,10UH K
LI5	0LA0821K119	INDUCTOR,8.2UH K
LI6	150-E16B	COIL,VAR,07S 1B 38MHZ
LI7	0LA0122K119	INDUCTOR,12UH K
LP10	0LA0102K119	INDUCTOR,10UH K
LP11	0LA0102K119	INDUCTOR,10UH K
LP12	0LA0102K119	INDUCTOR,10UH K
LP13	0LA0102K119	INDUCTOR,10UH K
LP14	0LA0102K119	INDUCTOR,10UH K
LP15	0LA0102K119	INDUCTOR,10UH K
LP16	0LA0102K119	INDUCTOR,10UH K
LP17	0LA0102K119	INDUCTOR,10UH K
LP18	0LA0102K119	INDUCTOR,10UH K
LP2	0LA0222K119	INDUCTOR,22UH K
LP3	150-C01D	COIL,CHOKE 0.55UH A 1105
LP4	0LA0102K119	INDUCTOR,10UH K
LP5	150-E08L	COIL,VAR,07S 1B 38.0MHZ
LP6	0LA0122K119	INDUCTOR,12UH K
LP7	0LA0102K119	INDUCTOR,10UH K
LP8	150-E08L	COIL,VAR,07S 1B 38.0MHZ
LP9	0LA0821K119	INDUCTOR,8.2UH K
LS13	0LA0102K119	INDUCTOR,10UH K
LS16	0LA0102K119	INDUCTOR,10UH K
LS17	0LA0102K119	INDUCTOR,10UH K
LS4	0LA0102K119	INDUCTOR,10UH K
LT75	0LA0101K119	INDUCTOR,1.0UH K
L01	0LA0102K119	INDUCTOR,10UH K
L1	0LA1000K119	INDUCTOR,100UH K
L1D	0LA0272K119	INDUCTOR,27UH K
L101	0LA0102K119	INDUCTOR,10UH K
L151	0LA0102K119	INDUCTOR,10UH K
L152	0LA0102K119	INDUCTOR,10UH K

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Replace only with part number specified.

LOCA. NO	PART NO	DESCRIPTION
L2	0LA0102K119	INDUCTOR,10UH K
L2	0LA0122K119	INDUCTOR,12UH K *LGESY
L2D	0LA0272K119	INDUCTOR,27UH K
L2001	0LA0101K119	INDUCTOR,1.0UH K
L2002	0LA0101K119	INDUCTOR,1.0UH K
L2003	0LA0101K119	INDUCTOR,1.0UH K
L2004	0LA0101K119	INDUCTOR,1.0UH K
L2005	0LA0101K119	INDUCTOR,1.0UH K
L2006	0LA0101K119	INDUCTOR,1.0UH K
L201	0LA0222K119	INDUCTOR,22UH K
L2051	0LA0681K119	INDUCTOR,6.8UH K
L2052	0LA0681K119	INDUCTOR,6.8UH K
L2251	0LA8200K029	INDUCTOR AXIAL LEAD,820UH 10% 2.6X7 TA52
L2252	0LA1001K129	INDUCTOR AXIAL LEAD,1000UH K 2.6X7 TP
L2253	0LA8200K029	INDUCTOR AXIAL LEAD,820UH 10% 2.6X7 TA52
L2254	0LA1001K129	INDUCTOR AXIAL LEAD,1000UH K 2.6X7 TP
L2255	0LA8200K029	INDUCTOR AXIAL LEAD,820UH 10% 2.6X7 TA52
L2256	0LA1001K129	INDUCTOR AXIAL LEAD,1000UH K 2.6X7 TP
L2257	0LA8200K029	INDUCTOR AXIAL LEAD,820UH 10% 2.6X7 TA52
L2258	0LA1001K129	INDUCTOR AXIAL LEAD,1000UH K 2.6X7 TP
L2259	0LA8200K029	INDUCTOR AXIAL LEAD,820UH 10% 2.6X7 TA52
L2260	0LA1001K129	INDUCTOR AXIAL LEAD,1000UH K 2.6X7 TP
L2261	0LA8200K029	INDUCTOR AXIAL LEAD,820UH 10% 2.6X7 TA52
L2262	0LA1001K129	INDUCTOR AXIAL LEAD,1000UH K 2.6X7 TP
L3	0LA0102K119	INDUCTOR,10UH K
L3D	0LA0272K119	INDUCTOR,27UH K
L301	0LA0221K139	INDUCTOR,2.2UH A +-10%
L4	0LA1000K119	INDUCTOR,100UH K
L4	0LA1800K119	INDUCTOR,180UH K *LGESY
L4D	0LA0272K119	INDUCTOR,27UH K
L401	150-717H	COIL,CHOKE 150UH,WN-3600
L402	150-717H	COIL,CHOKE 150UH,WN-3600
L405	0LA0102K119	INDUCTOR,10UH K
L406	150-L01S	COIL,H-LINEARITY 40UH
L407	150-W01D	COIL,WIDTH 3600UH
L5	0LA0102K119	INDUCTOR,10UH K
L5D	0LA0272K119	INDUCTOR,27UH K
L501	0LA0102K119	INDUCTOR,10UH K
L502	0LA0102K119	INDUCTOR,10UH K
L503	0LA0102K119	INDUCTOR,10UH K
L504	0LA0471K119	INDUCTOR,4.7UH K
L505	0LA0102K119	INDUCTOR,10UH K
L506	0LA0102K119	INDUCTOR,10UH K
L507	0LA0331K119	INDUCTOR AXIAL LEAD,3.3UH K 2.3*3.4 TP
L6	0LA0102K119	INDUCTOR,10UH K
L6D	0LA0272K119	INDUCTOR,27UH K
L8D	0LA0102K119	INDUCTOR,10UH K
⚠ L806	150-F03A	COIL,LINE FILTER UU2036 5.0MH
L810	150-C03A	COIL,CHOKE 1.04UH R3.5/05
L825	150-C03A	COIL,CHOKE 1.04UH R3.5/05
L841	150-C02F	COIL,CHOKE 82UH R1217
L842	150-C02F	COIL,CHOKE 82UH R1217
L851	150-C02F	COIL.CHOKE 82UH R1217
L881	150-C02P	COIL.CHOKE 1000UH R 1418
L883	150-C02F	COIL.CHOKE 82UH R1217
L884	150-C02F	COIL.CHOKE 82UH R1217
L885	150-C02F	COIL.CHOKE 82UH R1217
L902B	0LA1500K119	INDUCTOR.150UH K
L902G	0LA1500K119	INDUCTOR,150UH K
L902R	0LA1500K119	INDUCTOR.150UH K
⚠ T401	6174Z-6079D	F.B.T,FTMPC11-T6079D
T402	151-C02F	TRANSFORMER.H-DRIVE.EI-19.BULK
T403	151-415B	TRANSFORMER,HV-STABLE
T404	151-E06A	TRANSFORMER.DBF.EER-2834.BULK
⚠ T801	151-A07H	TRANSFORMER,SMPS,EER4042 SOOJUNG STR-6707 W
⚠ T825	6170VMCA01M	TRANSFORMER,SMPS[COIL],EER5435 SOOJUNG

CONNECTOR

LOCA. NO	PART NO	DESCRIPTION
	387-G03N	CONNECTOR ASSY,3P GIL-G TO GIL-G(900)
	387-G05Q	CONNECTOR ASSY.2.5MM 5P(L=1200) GIL-G TO GIL-
	387-G06P	CONNECTOR ASSY,6P GIL-G TO GIL-G(1000)
	387-G07M	CONNECTOR ASSY,7P GIL-G TO GIL-G(800)
	387-G12P	CONNECTOR ASSY,12P GIL-G TO GIL-G(1000)
	387-G12P	CONNECTOR ASSY,12P GIL-G TO GIL-G(1000)
	387-G13P	CONNECTOR ASSY,13P G1L-G TO G1L-G(1000)
	387-J12N	CONNECTOR ASSY,12P SHIELD(900) IL-G TO IL-G
	387-805N	CONNECTOR ASSY.4P HSG TO MXH8610 800MM
	6631V25022N	CONNECTOR ASSY.2P 900 / 200 IL-G TO 205/110T
	6631V25022P	CONNECTOR ASSY.3P 200 /1700 IL-G TO 205/110T
P402A	387-A27P	CONNECTOR ASSY,7P MIS 2.5MM (L=600)
P42PS	387-A31N	CONNECTOR ASSY,11P MIS 2.5MM(L=500)
P44A	387-907R	CONNECTOR ASSY,1P MXH8610 1400MM
P45PD	387-A24S	CONNECTOR ASSY,4P MIS 2.5MM (L=900)
P802A	6631V23001C	CONNECTOR ASSY,2.36PAI 2P(P=10) 1700MM HSG T
P803A	6631V23001D	CONNECTOR ASSY,3P(P=10-8) 1700MM HSG TO HSG
P84PP	387-812D	CONNECTOR ASSY,YJN250 5P(PCB TO PCB,YEONHO)
P85PP	387-812H	CONNECTOR ASSY,YJN250 9P(PCB TO PCB,YEONHO)
P911R	387-A24J	CONNECTOR ASSY,4P MIS 2.5MM (L=300)
P917B	387-A26J	CONNECTOR ASSY,6P MIS 2.5MM (L=300)
P917G	387-A26J	CONNECTOR ASSY,6P MIS 2.5MM (L=300)
P919B	387-A24J	CONNECTOR ASSY,4P MIS 2.5MM (L=300)

RESISTOR

LOCA. NO	PART NO	DESCRIPTION
AR1	180-E01J	R-ARRAY,1/8W 10K*12 J(1.778P)
AR2	180-E01C	R-ARRAY,1/8W 47KX5 K (1.778P)
FR401	180-D02E	R,RNF RND(S) CR 2W 1.0 J
FR402	180-D02E	R,RNF RND(S) CR 2W 1.0 J
FR403	180-D02C	R,RNF RND(S) EQ 2W 0.47 J
FR404	180-D02E	R,RNF RND(S) CR 2W 1.0 J
J12	0RD2700F609	R,CARBON FILM 270 1/6W 5
RI1	0RD2200F609	R,CARBON FILM 220 1/6W 5
RI10	0RD1002F609	R,CARBON FILM 10K 1/6W 5
RI11	0RD1000F609	R,CARBON FILM 100 1/6W 5
RI23	0RD1002F609	R,CARBON FILM 10K 1/6W 5

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LOCA. NO	PART NO	DESCRIPTION
RI3	0RD5601F609	R,CARBON FILM 5.6K 1/6W 5
RI30	0RD0392H609	R,CARBON FILM 39 1/2W 5
RI31	0RD0392H609	R,CARBON FILM 39 1/2W 5
RI33	0RD0332H609	R,CARBON FILM 33 1/2W 5
RI8	0RD5601F609	R,CARBON FILM 5.6K 1/6W 5
RL601	141-013B	RELAY HR-CR323DC12V(HANGUK)
RP31	0RN1002F409	R,METAL FILM 10K 1/6W 1
RP35	0RN3902F409	R, METAL FILM 39K 1/6W 1%
RP45	0RD0271H609	R,CARBON FILM 2.7 1/2W 5
RP61	0RD2400H609	R,CARBON FILM 240 1/2W 5
RP67	0RD4700F609	R,CARBON FILM 470 1/6W 5
RP82	0RD1002F609	R,CARBON FILM 10K 1/6W 5
RP83	0RD2200F609	R,CARBON FILM 220 1/6W 5
RP84	0RD1200H609	R,CARBON FILM 120 1/2W 5
RP85	0RD1200H609	R,CARBON FILM 120 1/2W 5
RP86	0RD1200H609	R,CARBON FILM 120 1/2W 5
RP87	0RD1200H609	R,CARBON FILM 120 1/2W 5
RP88	0RD1200H609	R,CARBON FILM 120 1/2W 5
RS39	0RD1002F609	R,CARBON FILM 10K 1/6W 5
RS40	0RD2200F609	R,CARBON FILM 220 1/6W 5
RS41	0RD2200F609	R,CARBON FILM 220 1/6W 5
RS42	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
RS43	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
RS44	0RD2200F609	R,CARBON FILM 220 1/6W 5
RS46	0RD2200F609	R,CARBON FILM 220 1/6W 5
RS56	0RD0332H609	R,CARBON FILM 33 1/2W 5
RT75	0RD0272H609	R,CARBON FILM 27 1/2W 5
RT76	0RD0622F609	R,CARBON FILM 62 1/6W 5
RT77	0RD2702F609	R,CARBON FILM 27K 1/6W 5
RT78	0RD1500F609	R,CARBON FILM 150 1/6W 5
RT79	0RD1000F609	R,CARBON FILM 100 1/6W 5
RT80	0RD2202F609	R,CARBON FILM 22K 1/6W 5
RT81	0RD2202F609	R,CARBON FILM 22K 1/6W 5
RT83	0RD4700F609	R,CARBON FILM 470 1/6W 5
RT84	0RD4700F609	R,CARBON FILM 470 1/6W 5
RT85	0RD4700F609	R,CARBON FILM 470 1/6W 5
RT87	0RD1002F609	R,CARBON FILM 10K 1/6W 5
RT88	0RD3600F609	R,CARBON FILM 360 1/6W 5
RT89	0RD4700F609	R,CARBON FILM 470 1/6W 5
RT90	0RD4700F609	R,CARBON FILM 470 1/6W 5
RT91	0RD4700F609	R,CARBON FILM 470 1/6W 5
RT92	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
RT93	0RD1000F609	R,CARBON FILM 100 1/6W 5
RT96	0RD2200F609	R,CARBON FILM 220 1/6W 5
RT97	0RD2200F609	R,CARBON FILM 220 1/6W 5
RT98	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5
R06	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R07	0RD2200F609	R,CARBON FILM 220 1/6W 5
R08	0RD2700F609	R,CARBON FILM 270 1/6W 5
R1	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R10	0RD2200F609	R,CARBON FILM 220 1/6W 5
R101	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5

LOCA. NO	PART NO	DESCRIPTION
R102	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R103	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R104	0RD0752H609	R,CARBON FILM 75 1/2W 5
R105	0RD0752H609	R,CARBON FILM 75 1/2W 5
R106	0RD1002H609	R,CARBON FILM 10K 1/2W 5
R107	0RS1500J607	R,METAL FILM OXIDE 150 1W 5%
R108	0RD1002H609	R,CARBON FILM 10K 1/2W 5
R11	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R12	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R12D	0RD0682F609	R,CARBON FILM 68 1/6W 5
R13	0RD2200F609	R,CARBON FILM 220 1/6W 5
R14	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R15	0RD1000F609	R,CARBON FILM 100 1/6W 5
R151	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R152	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R153	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R154	0RD3000H609	R,CARBON FILM 300 1/2W 5
R155	0RD3000H609	R,CARBON FILM 300 1/2W 5
R16	0RD1000F609	R,CARBON FILM 100 1/6W 5
R18	0RD5601F609	R,CARBON FILM 5.6K 1/6W 5
R19	0RD1004F609	R,CARBON FILM 1.0M 1/6W 5
R2	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R20	0RD5601F609	R,CARBON FILM 5.6K 1/6W 5
R2001	0RD2701F609	R,CARBON FILM 2.7K 1/6W 5
R2002	0RD2701F609	R,CARBON FILM 2.7K 1/6W 5
R2003	0RD2701F609	R,CARBON FILM 2.7K 1/6W 5
R2004	0RD2701F609	R,CARBON FILM 2.7K 1/6W 5
R2005	0RD2701F609	R,CARBON FILM 2.7K 1/6W 5
R2006	0RD2701F609	R,CARBON FILM 2.7K 1/6W 5
R2007	0RD2702F609	R,CARBON FILM 27K 1/6W 5
R2008	0RD2702F609	R,CARBON FILM 27K 1/6W 5
R2009	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R2010	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R2011	0RD4702F609	R,CARBON FILM 47K 1/6W 5
R2012	0RD4702F609	R,CARBON FILM 47K 1/6W 5
R2015	0RS2200J607	R,METAL FILM OXIDE 220 1W 5%
R2016	0RS1500J607	R,METAL FILM OXIDE 150 1W 5%
R2017	0RS0391K607	R,METAL FILM OXIDE 3.90 2W 5%
R2018	0RS0681K607	R,METAL FILM OXIDE 6.8 2W 5%
R2019	0RS1500J607	R,METAL FILM OXIDE 150 1W 5%
R2020	0RS2200J607	R,METAL FILM OXIDE 220 1W 5%
R2021	0RS0561K607	R,METAL FILM OXIDE 5.60 2W 5%
R2022	0RS0561K607	R,METAL FILM OXIDE 5.60 2W 5%
R2025	0RD4702F609	R,CARBON FILM 47K 1/6W 5
R2026	0RD4702F609	R,CARBON FILM 47K 1/6W 5
R2027	0RD4702F609	R,CARBON FILM 47K 1/6W 5
R2028	0RD4702F609	R,CARBON FILM 47K 1/6W 5
R2031	0RS2200J607	R,METAL FILM OXIDE 220 1W 5%
R2032	0RS1500J607	R,METAL FILM OXIDE 150 1W 5%
R2033	0RS0681K607	R,METAL FILM OXIDE 6.8 2W 5%
R2034	0RS0561K607	R,METAL FILM OXIDE 5.60 2W 5%
R2047	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5

The components identified by shading and mark ⚠ are critical for safety.
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LOCA. NO	PART NO	DESCRIPTION
R2048	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5
R2049	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5
R2050	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5
R2051	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5
R2052	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5
R2053	0RS0561K607	R,METAL FILM OXIDE 5.60 2W 5%
R2054	0RS0561K607	R,METAL FILM OXIDE 5.60 2W 5%
R2055	0RS0681K607	R,METAL FILM OXIDE 6.8 2W 5%
R2056	0RS0681K607	R,METAL FILM OXIDE 6.8 2W 5%
R2057	0RS0561K607	R,METAL FILM OXIDE 5.60 2W 5%
R2058	0RS0561K607	R,METAL FILM OXIDE 5.60 2W 5%
R21	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R219	0RD0472F609	R,CARBON FILM 47 1/6W 5
R22	0RD6802F609	R,CARBON FILM 68K 1/6W 5
R22D	0RD3900F609	R,CARBON FILM 390 1/6W 5
R220	0RD8200F609	R,CARBON FILM 820 1/6W 5
R223	0RD0752F609	R,CARBON FILM 75 1/6W 5
R223	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R226	0RD0752F609	R,CARBON FILM 75 1/6W 5
R227	0RD0752F609	R,CARBON FILM 75 1/6W 5
R228	0RD2202F609	R,CARBON FILM 22K 1/6W 5
R23	0RD2200F609	R,CARBON FILM 220 1/6W 5
R24	0RD2200F609	R,CARBON FILM 220 1/6W 5
R241	0RD1000F609	R,CARBON FILM 100 1/6W 5
R242	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R244	0RD0472F609	R,CARBON FILM 47 1/6W 5
R248	0RD1202F609	R,CARBON FILM 12K 1/6W 5
R25	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R25D	0RD1000F609	R,CARBON FILM 100 1/6W 5
R251	0RD1202F609	R,CARBON FILM 12K 1/6W 5
R252	0RD0472F609	R,CARBON FILM 47 1/6W 5
R257	0RD1800F609	R,CARBON FILM 180 1/6W 5
R258	0RD1000F609	R,CARBON FILM 100 1/6W 5
R26	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R26D	0RD1000F609	R,CARBON FILM 100 1/6W 5
R265	0RD0681F609	R,CARBON FILM 6.8 1/6W 5
R27	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R270	0RD4703F609	R,CARBON FILM 470K 1/6W 5
R271	0RD4703F609	R,CARBON FILM 470K 1/6W 5
R273	0RD2200F609	R,CARBON FILM 220 1/6W 5
R274	0RD2200F609	R,CARBON FILM 220 1/6W 5
R275	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R28	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R29	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R3	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R30	0RD2200F609	R,CARBON FILM 220 1/6W 5
R302	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R303	0RD3302F609	R,CARBON FILM 33K 1/6W 5
R304	0RD6801F609	R,CARBON FILM 6.8K 1/6W 5
R305	0RD3002F609	R,CARBON FILM 30K 1/6W 5
R307	0RD5602F609	R,CARBON FILM 56K 1/6W 5
R308	0RD3302F609	R,CARBON FILM 33K 1/6W 5

LOCA. NO	PART NO	DESCRIPTION
R309	0RD3901F609	R,CARBON FILM 3.9K 1/6W 5
R31	0RD0472F609	R,CARBON FILM 47 1/6W 5
R310	0RD4702F609	R,CARBON FILM 47K 1/6W 5
R311	0RS0151K607	R,METAL FILM OXIDE 1.50 2W 5%
R312	0RS0151K607	R,METAL FILM OXIDE 1.50 2W 5%
R314	0RS0471H609	R,METAL FILM OXIDE 4.7 1/2W 5
R315	0RS1000J607	R,METAL FILM OXIDE 100 1W 5%
R316	0RS1000H609	R,METAL FILM OXIDE 100 1/2W 5
R317	0RS1000H609	R,METAL FILM OXIDE 100 1/2W 5
R318	0RS1000H609	R,METAL FILM OXIDE 100 1/2W 5
R32	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R320	0RD3901F609	R,CARBON FILM 3.9K 1/6W 5
R321	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R322	0RD3901F609	R,CARBON FILM 3.9K 1/6W 5
R323	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R329	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R33	0RD2200F609	R,CARBON FILM 220 1/6W 5
R330	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R331	0RD3000F609	R,CARBON FILM 300 1/6W 5
R332	0RD1303F609	R,CARBON FILM 130K 1/6W 5
R333	0RD5601F609	R,CARBON FILM 5.6K 1/6W 5
R334	0RD2701F609	R,CARBON FILM 2.7K 1/6W 5
R335	0RD1802F609	R,CARBON FILM 18K 1/6W 5
R336	0RD8201F609	R,CARBON FILM 8.2K 1/6W 5
R337	0RD3600F609	R,CARBON FILM 360 1/6W 5
R338	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R339	0RD1801F609	R,CARBON FILM 1.8K 1/6W 5
R34	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R340	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R341	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R342	0RD1002H609	R,CARBON FILM 10K 1/2W 5
R343	0RS4702K607	R,METAL FILM OXIDE 47K 2W 5%
R344	0RS4702K607	R,METAL FILM OXIDE 47K 2W 5%
R345	0RS4702K607	R,METAL FILM OXIDE 47K 2W 5%
R346	0RS4702K607	R,METAL FILM OXIDE 47K 2W 5%
R347	0RS4702K607	R,METAL FILM OXIDE 47K 2W 5%
R348	0RS4702K607	R,METAL FILM OXIDE 47K 2W 5%
R349	0RS4700K607	R,METAL FILM OXIDE 470 2W 5%
R35	0RD2200F609	R,CARBON FILM 220 1/6W 5
R350	0RD3302F609	R,CARBON FILM 33K 1/6W 5
R351	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R352	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R353	0RD2001F609	R,CARBON FILM 2.0K 1/6W 5
R354	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R355	0RD1802F609	R,CARBON FILM 18K 1/6W 5
R356	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R357	0RD1003F609	R,CARBON FILM 100K 1/6W 5
R358	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R359	0RD1000F609	R,CARBON FILM 100 1/6W 5
R36	0RD2200F609	R,CARBON FILM 220 1/6W 5
R360	0RD1002H609	R,CARBON FILM 10K 1/2W 5
R37	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5

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LOCA. NO	PART NO	DESCRIPTION
R371	0RD7501F609	R,CARBON FILM 7.5K 1/6W 5
R372	0RD0472F609	R,CARBON FILM 47 1/6W 5
R373	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R374	0RD4702F609	R,CARBON FILM 47K 1/6W 5
R375	0RD3902F609	R,CARBON FILM 39K 1/6W 5
R376	0RD2401F609	R,CARBON FILM 2.4K 1/6W 5
R378	0RD2200F609	R,CARBON FILM 220 1/6W 5
R38	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R39	0RD6802F609	R,CARBON FILM 68K 1/6W 5
R4	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R40	0RD2001F609	R,CARBON FILM 2.0K 1/6W 5
R401	0RD1000F609	R,CARBON FILM 100 1/6W 5
R402	0RD4700F609	R,CARBON FILM 470 1/6W 5
R403	0RS2201K607	R,METAL FILM OXIDE 2.20K 2W 5%
R404	0RN0270J607	R,METAL FILM 0.27 1W 5%
R405	0RS0472H609	R,METAL FILM OXIDE 47 1/2W 5
R406	0RS0470J607	R,METAL FILM OXIDE 0.47 1W 5%
R407	0RS0681J607	R,METAL FILM OXIDE 6.8 1W 5%
R408	0RS4701L667	R,METAL FILM OXIDE 4.7K 3W 5 SF30
R409	0RS6800K607	R,METAL FILM OXIDE 680 2W 5%
R410	0RD4700H609	R,CARBON FILM 470 1/2W 5
R411	0RD1202F609	R,CARBON FILM 12K 1/6W 5
R412	0RD1003F609	R,CARBON FILM 100K 1/6W 5
R413	0RD5602F609	R,CARBON FILM 56K 1/6W 5
R414	0RD2403F609	R,CARBON FILM 240K 1/6W 5
R415	0RD6801F609	R,CARBON FILM 6.8K 1/6W 5
R416	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R417	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R419	0RD3002F609	R,CARBON FILM 30K 1/6W 5
R42	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R420	0RD5602F609	R,CARBON FILM 56K 1/6W 5
R421	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R422	0RD1501H609	R,CARBON FILM 1.5K 1/2W 5
R423	0RD1501H609	R,CARBON FILM 1.5K 1/2W 5
R424	0RD1501H609	R,CARBON FILM 1.5K 1/2W 5
R425	0RS0470H609	R,METAL FILM OXIDE 0.47 1/2W 5%
R43	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R431	0RS4702H609	R,METAL FILM OXIDE 47K 1/2W 5
R432	0RS2702H609	R,METAL FILM OXIDE 27K 1/2W 5
R433	0RS1002H609	R,METAL FILM OXIDE 10K 1/2W 5
R434	0RS0152J607	R,METAL FILM OXIDE 15 1W 5% TA62
R435	0RS4700K607	R,METAL FILM OXIDE 470 2W 5%
R436	0RD1501F609	R,CARBON FILM 1.5K 1/6W 5
R437	0RD0302F609	R,CARBON FILM 30 1/6W 5 TA52
R438	0RD0272F609	R,CARBON FILM 27 1/6W 5%
R439	0RD4700F609	R,CARBON FILM 470 1/6W 5
R44	0RD1000F609	R,CARBON FILM 100 1/6W 5
R440	0RD5600F609	R,CARBON FILM 560 1/6W 5
R441	0RD3902F609	R,CARBON FILM 39K 1/6W 5
R442	0RD1103F609	R,CARBON FILM 110K 1/6W 5
R443	0RS3900J607	R,METAL FILM OXIDE 390 1W 5%
R444	0RD2402F609	R,CARBON FILM 24K 1/6W 5

LOCA. NO	PART NO	DESCRIPTION
R445	0RD5601F609	R,CARBON FILM 5.6K 1/6W 5
R446	0RD8203H609	R,CARBON FILM 820K 1/2W 5
R447	0RS6801H609	R,METAL FILM OXIDE 6.8K 1/2W 5
R448	0RS3302H609	R.METAL FILM OXIDE 33K 1/2W 5 TA52
R449	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5
R45	0RD2200F609	R,CARBON FILM 220 1/6W 5
R450	0RD1003F609	R,CARBON FILM 100K 1/6W 5
R451	0RD1000F609	R,CARBON FILM 100 1/6W 5
R452	0RD3901F609	R,CARBON FILM 3.9K 1/6W 5
R453	0RD1302F609	R,CARBON FILM 13K 1/6W 5
R454	0RD2401F609	R,CARBON FILM 2.4K 1/6W 5
R455	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R456	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R457	0RS0431J607	R,METAL FILM OXIDE 4.30 1W 5% TA62
R458	180-C02M	R,CARBON COMPOSIT 5.6KOHM 1/2 W 10%
R46	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R460	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R461	0RS0470J607	R,METAL FILM OXIDE 0.47 1W 5%
R463	0RD3901F609	R,CARBON FILM 3.9K 1/6W 5
R464	0RD1502F609	R,CARBON FILM 15K 1/6W 5
R465	0RD1003F609	R,CARBON FILM 100K 1/6W 5
R466	0RD4301F609	R,CARBON FILM 4.3K 1/6W 5
R47	0RD2200F609	R,CARBON FILM 220 1/6W 5
R471	0RD5600F609	R,CARBON FILM 560 1/6W 5
R473	0RD1003F609	R,CARBON FILM 100K 1/6W 5
R474	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R475	0RD1302F609	R,CARBON FILM 13K 1/6W 5
R475	0RD1602F609	R,CARBON FILM 16K 1/6W 5 *LGESY
R476	0RD2200F609	R,CARBON FILM 220 1/6W 5
R48	0RD1000F609	R,CARBON FILM 100 1/6W 5
R49	0RD1000F609	R,CARBON FILM 100 1/6W 5
R50	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R501	0RD1003F609	R,CARBON FILM 100K 1/6W 5
R502	0RD1000F609	R,CARBON FILM 100 1/6W 5
R503	0RD1000F609	R,CARBON FILM 100 1/6W 5
R504	0RD1000F609	R,CARBON FILM 100 1/6W 5
R505	0RD1000F609	R,CARBON FILM 100 1/6W 5
R506	0RD1000F609	R,CARBON FILM 100 1/6W 5
R508	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R509	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R51	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R510	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R511	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R512	0RD2200F609	R,CARBON FILM 220 1/6W 5
R513	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R514	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R516	0RD2400F609	R,CARBON FILM 240 1/6W 5
R517	0RD2400F609	R,CARBON FILM 240 1/6W 5
R518	0RD2400F609	R,CARBON FILM 240 1/6W 5
R519	0RD2702F609	R,CARBON FILM 27K 1/6W 5
R52	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R520	0RD4702F609	R,CARBON FILM 47K 1/6W 5

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LOCA. NO	PART NO	DESCRIPTION
R521	0RD2200F609	R,CARBON FILM 220 1/6W 5
R524	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R525	0RD1000F609	R,CARBON FILM 100 1/6W 5
R526	0RD3300F609	R,CARBON FILM 330 1/6W 5
R527	0RD3300F609	R,CARBON FILM 330 1/6W 5
R528	0RD3300F609	R,CARBON FILM 330 1/6W 5
R53	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R530	0RD5102F609	R,CARBON FILM 51K 1/6W 5
R531	0RD4700F609	R,CARBON FILM 470 1/6W 5
R532	0RD2200F609	R,CARBON FILM 220 1/6W 5
R533	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R536	0RD2200F609	R,CARBON FILM 220 1/6W 5
R537	0RD4300F609	R,CARBON FILM 430 1/6W 5
R538	0RD2200F609	R,CARBON FILM 220 1/6W 5
R539	0RD4300F609	R,CARBON FILM 430 1/6W 5
R54	0RD1000F609	R,CARBON FILM 100 1/6W 5
R540	0RD2200F609	R,CARBON FILM 220 1/6W 5
R541	0RD4300F609	R,CARBON FILM 430 1/6W 5
R542	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5
R543	0RD1803F609	R,CARBON FILM 180K 1/6W 5
R544	0RD8200F609	R,CARBON FILM 820 1/6W 5
R545	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R55	0RD1000F609	R,CARBON FILM 100 1/6W 5
R56	0RD1000F609	R,CARBON FILM 100 1/6W 5
R57	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R58	0RD2200F609	R,CARBON FILM 220 1/6W 5
R59	0RD2200F609	R,CARBON FILM 220 1/6W 5
R6	0RD2202F609	R,CARBON FILM 22K 1/6W 5
R60	0RD2200F609	R,CARBON FILM 220 1/6W 5
R61	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R62	0RD2200F609	R,CARBON FILM 220 1/6W 5
R627	0RD5602F609	R,CARBON FILM 56K 1/6W 5
R628	0RD5602F609	R,CARBON FILM 56K 1/6W 5
R63	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R633	0RD5602F609	R,CARBON FILM 56K 1/6W 5
R634	0RD1301F609	R,CARBON FILM 1.3K 1/6W 5
R635	0RD5602F609	R,CARBON FILM 56K 1/6W 5
R637	0RD3001F609	R,CARBON FILM 3.0K 1/6W 5
R638	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5
R639	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5
R640	0RD1000F609	R,CARBON FILM 100 1/6W 5
R641	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R642	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R643	0RD1000F609	R,CARBON FILM 100 1/6W 5
R644	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5
R645	0RD6202F609	R,CARBON FILM 62K 1/6W 5
R646	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R647	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5
R648	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R649	0RD1301F609	R,CARBON FILM 1.3K 1/6W 5
R650	0RD3001F609	R,CARBON FILM 3.0K 1/6W 5
R651	0RS2001K607	R,METAL FILM OXIDE 2K 2W 5%

LOCA. NO	PART NO	DESCRIPTION
R652	0RS2001K607	R,METAL FILM OXIDE 2K 2W 5%
R653	0RD1002H609	R,CARBON FILM 10K 1/2W 5
R654	0RD1002H609	R,CARBON FILM 10K 1/2W 5
R658	0RS0391K607	R,METAL FILM OXIDE 3.90 2W 5%
R659	0RS0391K607	R,METAL FILM OXIDE 3.90 2W 5%
R666	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R67	0RD1601F609	R,CARBON FILM 1.6K 1/6W 5
R68	0RD2401F609	R,CARBON FILM 2.4K 1/6W 5
R69	0RD2401F609	R,CARBON FILM 2.4K 1/6W 5
R7	0RD2200F609	R,CARBON FILM 220 1/6W 5
R70	0RD2401F609	R,CARBON FILM 2.4K 1/6W 5
R71	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R73	0RD7502F609	R,CARBON FILM 75K 1/6W 5
R74	0RD2200F609	R,CARBON FILM 220 1/6W 5
R8	0RD2200F609	R,CARBON FILM 220 1/6W 5
⚠ R801	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R803	0RD1503H609	R,CARBON FILM 150K 1/2W 5
R804	0RD1503H609	R,CARBON FILM 150K 1/2W 5
R805	0RS2202K607	R,METAL FILM OXIDE 22K 2W 5%
R807	0RD1202H609	R,CARBON FILM 12K 1/2W 5
R808	180-A01E	R,RW ROUND G 2W 0.33 J
R809	0RS0222K607	R,METAL FILM OXIDE 22 2W 5%
R810	0RD1801F609	R,CARBON FILM 1.8K 1/6W 5
R811	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R813	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R817	0RS1002K607	R,METAL FILM OXIDE 10K 2W 5%
R818	0RS4701K607	R,METAL FILM OXIDE 4.70K 2W 5%
R819	0RD1801F609	R,CARBON FILM 1.8K 1/6W 5
R821	0RS2202K607	R,METAL FILM OXIDE 22K 2W 5%
R824	0RN0680H609	R,METAL FILM 0.68 1/2W 5
R825	180-A01D	R,RW ROUND G 2W 0.16 J
R826	0RS0132K607	R,METAL FILM OXIDE 13 2W 5%
R827	0RN0680H609	R,METAL FILM 0.68 1/2W 5
R828	0RD1502F609	R,CARBON FILM 15K 1/6W 5
R829	0RS1000K607	R,METAL FILM OXIDE 100 2W 5%
R830	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R831	0RD2401F609	R,CARBON FILM 2.4K 1/6W 5
R832	0RD3901F609	R,CARBON FILM 3.9K 1/6W 5
R833	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R834	0RS6801K607	R,METAL FILM OXIDE 6.80K 2W 5%
⚠ R840	180-C02H	R,CARBON COMPOSIT C12GK825V(RC 1/2W 8.2M K TA)
R841	0RS0102K607	R,METAL FILM OXIDE 10 2W 5%
R843	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R845	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R850	180-A03S	RESISTOR RW RECT 5W 3.6 J DOUBLE
R851	0RD2201F609	R,CARBON FILM 2.2K 1/6W 5
R852	0RD1201F609	R,CARBON FILM 1.2K 1/6W 5
R853	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5
R854	0RD4301F609	R,CARBON FILM 4.3K 1/6W 5
R856	0RS1002K607	R,METAL FILM OXIDE 10K 2W 5%
R857	0RD1501H609	R,CARBON FILM 1.5K 1/2W 5
R858	0RD1002F609	R,CARBON FILM 10K 1/6W 5

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LOCA. NO	PART NO	DESCRIPTION
R859	0RS0472K607	R,METAL FILM OXIDE 47 2W 5%
R860	0RD3301F609	R,CARBON FILM 3.3K 1/6W 5
R861	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R862	0RS2001K607	R,METAL FILM OXIDE 2K 2W 5%
R863	0RS2001K607	R,METAL FILM OXIDE 2K 2W 5%
R864	0RS2001K607	R,METAL FILM OXIDE 2K 2W 5%
R865	0RD1001F609	R,CARBON FILM 1.0K 1/6W 5
R866	0RS2001K607	R,METAL FILM OXIDE 2K 2W 5%
R881	0RD8201F609	R,CARBON FILM 8.2K 1/6W 5
R882	0RD1002F609	R,CARBON FILM 10K 1/6W 5
R884	0RS0562K607	R,METAL FILM OXIDE 56 2W 5%
R885	0RD1302F609	R,CARBON FILM 13K 1/6W 5
R890	0RD1502F609	R,CARBON FILM 15K 1/6W 5
R891	0RD2001F609	R,CARBON FILM 2.0K 1/6W 5
R892	0RD7501F609	R,CARBON FILM 7.5K 1/6W 5
R9	0RD4701F609	R,CARBON FILM 4.7K 1/6W 5
R905B	0RD1000F609	R,CARBON FILM 100 1/6W 5
R905G	0RD1000F609	R,CARBON FILM 100 1/6W 5
R905R	0RD1000F609	R,CARBON FILM 100 1/6W 5
R906B	0RS1202K607	R,METAL FILM OXIDE 12K 2W 5%
R906G	0RS1202K607	R,METAL FILM OXIDE 12K 2W 5%
R906R	0RS1202K607	R,METAL FILM OXIDE 12K 2W 5%
R907B	0RS1502K607	R,METAL FILM OXIDE 15K 2W 5%
R907G	0RS1502K607	R,METAL FILM OXIDE 15K 2W 5%
R907R	0RS1502K607	R,METAL FILM OXIDE 15K 2W 5%
R908B	0RD8201H609	R,CARBON FILM 8.2K 1/2W 5
R908G	0RD8201H609	R,CARBON FILM 8.2K 1/2W 5
R908R	0RD8201H609	R,CARBON FILM 8.2K 1/2W 5
R909B	0RD5600H609	R,CARBON FILM 560 1/2W 5
R909G	0RD5600H609	R,CARBON FILM 560 1/2W 5
R909R	0RD5600H609	R,CARBON FILM 560 1/2W 5
R910B	0RD0222F609	R,CARBON FILM 22 1/6W 5
R910G	0RD0222F609	R,CARBON FILM 22 1/6W 5
R910R	0RD0222F609	R,CARBON FILM 22 1/6W 5
R911B	0RD2203H609	R,CARBON FILM 220K 1/2W 5
R911G	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R911R	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R912B	0RD2203H609	R,CARBON FILM 220K 1/2W 5
R912G	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R912R	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R913B	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R913G	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R913R	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R914B	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R914G	0RD2203H609	R,CARBON FILM 220K 1/2W 5
R914R	0RD2203H609	R,CARBON FILM 220K 1/2W 5
R915B	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R915G	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R915R	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R916B	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R916G	0RD2203H609	R,CARBON FILM 220K 1/2W 5
R916R	0RD2203H609	R,CARBON FILM 220K 1/2W 5

LOCA. NO	PART NO	DESCRIPTION
R917B	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R917G	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R917R	180-C02L	R,CARBON COMPOSITE 0.47MOHM 1/2 W 10%
R919B	0RD3300F609	R,CARBON FILM 330 1/6W 5
R919G	0RD3300F609	R,CARBON FILM 330 1/6W 5
R919R	0RD3300F609	R,CARBON FILM 330 1/6W 5
R920B	0RD2000F609	R,CARBON FILM 200 1/6W 5
R920G	0RD2000F609	R,CARBON FILM 200 1/6W 5
R920R	0RD2700F609	R,CARBON FILM 270 1/6W 5
R921B	0RD1000F609	R,CARBON FILM 100 1/6W 5
R921G	0RD1000F609	R,CARBON FILM 100 1/6W 5
R921R	0RD1000F609	R,CARBON FILM 100 1/6W 5
VRI1	180-F03H	R,SEMI-FIX(H) EVN-DJAA03 B103
VRP1	180-F03J	R,SEMI-FIX(H) EVN-DJAA03 B203
VR301	180-F04K	R,NVZ6TLT B503 SEMI-FIX(H) TA
VR401	180-F04H	R,NVZ6TLT B103 SEMI-FIX(H) TA
VR402	180-F04H	R,NVZ6TLT B103 SEMI-FIX(H) TA
VR902B	180-102A	R,RVC1418EGN-811-1ZB-105
VR902G	180-102A	R,RVC1418EGN-811-1ZB-105
VR902R	180-102A	R,RVC1418EGN-811-1ZB-105
ZD8	0RD5101F609	R,CARBON FILM 5.1K 1/6W 5

SPARK GAP

LOCA. NO	PART NO	DESCRIPTION
SG401	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23
SG901B	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23
SG901G	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23
SG901R	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23
SG902B	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23
SG902G	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23
SG902R	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23

SWITCH

LOCA. NO	PART NO	DESCRIPTION
SW01	140-191A	SWITCH TACT,KHH-15910
SW02	140-191A	SWITCH TACT,KHH-15910
SW03	140-191A	SWITCH TACT,KHH-15910
SW04	140-191A	SWITCH TACT,KHH-15910
SW05	140-191A	SWITCH TACT,KHH-15910
SW06	140-191A	SWITCH TACT,KHH-15910
SW07	140-191A	SWITCH TACT,KHH-15910
SW08	140-191A	SWITCH TACT,KHH-15910
⚠ SW801	6600VM2001A	SWITCH,PUSH POWER SDDFC3 4A/128A 250V

CRYSTAL & FILTER

LOCA. NO	PART NO	DESCRIPTION
L801	150-F06U	FILTER(CIRC),LINE SQE3535 27.5MH 0.6PHY 70TURN *CIS
L801	150-F06R	FILTER(CIRC),LINE SQE3535 20MH
L802	150-F06U	FILTER(CIRC),LINE SQE3535 27.5MH 0.6PHY 70TURN *CIS
L802	150-F06R	FILTER(CIRC),LINE SQE3535 20MH
L803	150-F06U	FILTER(CIRC),LINE SQE3535 27.5MH 0.6PHY 70TURN *CIS
L803	150-F06R	FILTER(CIRC),LINE SQE3535 20MH
L804	150-F06U	FILTER(CIRC),LINE SQE3535 27.5MH 0.6PHY 70TURN *CIS
L804	150-F06R	FILTER(CIRC),LINE SQE3535 20MH
XP1	156-A05B	CRYSTAL,4.433619 SER.00262 TP PHILIPS

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

LOCA. NO	PART NO	DESCRIPTION
XP2	156-A01B	CRYSTAL,3.579545 16PF 90 OHM
XP3	156-A02H	CRYSTAL,20.480000 18PF 20 OHM BULK
XS11	156-A02M	CRYSTAL,18.432000 10PF 20 OHM BULK
XT75	156-A02U	CRYSTAL,27.00000 20PF 20 OHM BULK
X1	156-A01P	CRYSTAL,8.000000 16PF 40 OHM BULK
X2051	156-A02W	CRYSTAL,STD KOOKJE HC-49/U 11.0592MHZ (30P
X501	156-A02V	CRYSTAL,STD KD162005DB KDS HC-49/U 16.2MHZ
ZI1	166-A01F	FILTER,SAF32.5MCD80Z
ZI2	166-A01E	FILTER,OFWK6266K
ZI3	166-C04B	FILTER,TRAP TPWA03B-TF21(5.5/6.0)
ZI3	166-C04B	FILTER,TRAP TPWA03B-TF21(5.5/6.0)
ZI4	166-C02A	FILTER,TRAP TPS4.5MC-TF21
ZI4	166-C02A	FILTER,TRAP TPS4.5MC-TF21
ZP1	166-A01E	FILTER,OFWK6266K
ZP2	166-C02C	FILTER,TRAP TPS5.5MB-TF21
ZP2	166-C02C	FILTER,TRAP TPS5.5MB-TF21
Z2000	166-F01G	FILTER,EMI,DSS306-93FZ103N 100V TA
Z2001	166-F01G	FILTER,EMI,DSS306-93FZ103N 100V TA
Z2002	166-202B	FILTER,EMI DSS306-93Y5S 271M 100V(TA)
Z2003	166-202B	FILTER,EMI DSS306-93Y5S 271M 100V(TA)
Z2004	166-F01A	FILTER(CIRC),EMI DSS306-93 Y5S 330M 100V TA
Z2005	166-F01A	FILTER(CIRC),EMI DSS306-93 Y5S 330M 100V TA
Z2006	166-F01A	FILTER(CIRC),EMI DSS306-93 Y5S 330M 100V TA
Z2007	166-F01A	FILTER(CIRC),EMI DSS306-93 Y5S 330M 100V TA
Z2008	166-F01A	FILTER(CIRC),EMI DSS306-93 Y5S 330M 100V TA
Z2009	166-F01G	FILTER,EMI,DSS306-93FZ103N 100V TA
Z2010	166-F01G	FILTER,EMI,DSS306-93FZ103N 100V TA
Z2011	166-F01G	FILTER,EMI,DSS306-93FZ103N 100V TA
Z2012	166-F01G	FILTER,EMI,DSS306-93FZ103N 100V TA
Z2101	166-F01G	FILTER,EMI,DSS306-93FZ103N 100V TA
Z2102	166-F01G	FILTER,EMI,DSS306-93FZ103N 100V TA
Z2201	166-F01G	FILTER
Z2202	166-F01G	FILTER,EMI,DSS306-93FZ103N 100V TA

MISCELLANEOUS

LOCA. NO	PART NO	DESCRIPTION
	381-226G	SOCKET,CPT PCS628-01R W/RC BULK(NO5)
DL04	0DL100000AE	LED,DL-1LO (DIFFUSION TYPE)
JA201	381-091A	SOCKET,SCART JACK 21PIN
JA202	380-392A	JACK,A/V IN-OUT(6P)
JA203	380-404A	JACK,(PHSJ-9504)
NTC801	163-048A	THERMISTOR,NTC KL15L010
NTC802	163-048A	THERMISTOR,NTC KL15L010
PA01C	106-059A	PRE-AMP,SBX1610-52
P206A	380-389B	JACK,A/V 3P (WITH SWITCH)
P207A	380-404A	JACK,(PHSJ-9504)
SP101	450-A20B	ADAPTER,RF SPLITTER MDZX9-901A
TU101	113-243B	TUNER,TUGG9-A07P(HYPER)
TU151	113-243B	TUNER,TUGG9-A07P(HYPER)
VA801	164-003D	VARISTOR,SVC 561D-14A

ACCESSORIES

LOCA. NO	PART NO	DESCRIPTION
A1	3828VA0160A	MANUAL.OWNERS MP87B LG EN 7WTX *CASA
A1	3828VA0160B	MANUAL.OWNERS MP87B LG CH EN 07WTX *LGESY
A1	3828VA0160C	MANUAL.OWNERS MP87B . LG EN RU 7WTX 340M RU
A1	3828VA0160D	MANUAL.OWNERS MP87B LG EN AR 7WTX *V HOME KOOHEJI
A1	3828VA0160E	MANUAL.OWNERS MP87B LG EN FR 07WTX *LGEAL
A1	3828VA0139A	MANUAL.OWNERS MP87A LG ENG 007A TX *LGEGF
A2	6710V00007W	REMOTE CONTROLLER